

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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FIDELITY INFORMATION SERVICES, LLC,  
Petitioner,

v.

GROOVE DIGITAL, INC.,  
Patent Owner.

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IPR2019-00050  
Patent 9,454,762 B2

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Before BRYAN F. MOORE, NORMAN H. BEAMER, and  
STACY B. MARGOLIES, *Administrative Patent Judges*.

BEAMER, *Administrative Patent Judge*.

JUDGMENT  
Final Written Decision  
Determining Some Challenged Claims Unpatentable  
Denying Petitioner's Motion to Exclude  
*35 U.S.C. § 318(a)*

## I. INTRODUCTION

On October 17, 2018, Fidelity Information Services, LLC (“Petitioner”) filed a Petition (Paper 2, “Pet.”) to institute an *inter partes* review of claims 1, 3, 7–9, 14, 18–20, 22, 24–25, 29–31, 33, and 35–37 of U.S. Patent No. 9,454,762 B2 (Ex. 1001, “the ’762 patent”). On February 7, 2019, Groove Digital, Inc. (“Patent Owner”) filed a Preliminary Response (Paper 11, “Prelim. Resp.”). Pursuant to a March 7, 2019 Order (Paper 15), Petitioner filed a Reply to the Preliminary Response (Paper 16), and Patent Owner filed a Sur-Reply (Paper 18).

On May 3, 2019, applying the standard set forth in 35 U.S.C. § 314(a), which requires demonstration of a reasonable likelihood that Petitioner would prevail with respect to at least one challenged claim, we instituted an *inter partes* review of the challenged claims. Paper 19 (“Institution Dec.”). In the Institution Decision, we determined Petitioner demonstrated a reasonable likelihood that it would prevail as to the challenged claims, and we instituted trial on all claims and all grounds in the Petition. Institution Dec. 24.

Following institution, Patent Owner filed a Response to the Petition (Paper 27, “PO Resp.”), Petitioner filed confidential and redacted versions of a Reply (Papers 41 and 44, “Pet. Reply”), and Patent Owner filed confidential and redacted versions of a Sur-Reply (Paper 49 and 50, “PO Sur-Reply”).<sup>1</sup> In addition, Petitioner filed a Motion to Exclude a portion of the declaration of Samuel Gaidemak, one of the inventors of the ’762 patent.

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<sup>1</sup> Citations to Petitioner’s Reply and Patent Owner’s Sur-Reply are to the confidential versions.

Paper 54 (directed to Ex. 2030 ¶ 46). Patent Owner filed an Opposition to the Motion (Paper 57), and Petitioner filed a Reply (Paper 59).

On January 9, 2020, Patent Owner’s request for live testimony of Mr. Gaidemak during the oral hearing was granted. Paper 51. The oral hearing and inventor testimony took place on February 4, 2020. Confidential and non-confidential versions of the Transcript are included in the record as Papers 62 and 61, respectively.

After considering the parties’ arguments and supporting evidence, we determine that Petitioner has proven by a preponderance of the evidence that claims 14, 18–20, 22, 24–25, 29–31, 33, 35, and 37 of the ’762 patent are unpatentable, but has not proven by a preponderance of the evidence that claims 1, 3, 7–9, and 36 of the ’762 patent are unpatentable. 35 U.S.C. § 316(e) (2018).

## II. BACKGROUND

### *A. The ’762 Patent*

The ’762 patent, titled “System And Method For The Delivery Of Content To A Networked Device,” issued September 27, 2016, from an application filed March 17, 2006, and claims priority from a provisional application filed March 18, 2005. Ex. 1001, codes (54), (45), (22), (60). The parties have not submitted a copy of the March 18, 2005 provisional application; a copy, annotated with consecutive page numbers, has been added to the record. Ex. 3001.

The ’762 patent describes distributing an advertisement to end users on a network by displaying an “applet (also known as an alert or notification)” on the desktop of a networked user device such as a computer,

PDA, or cell phone. *Id.* at 1:13–16, 5:16–18, 6:23–26. An example of such an applet is illustrated in Figure 1, reproduced below.

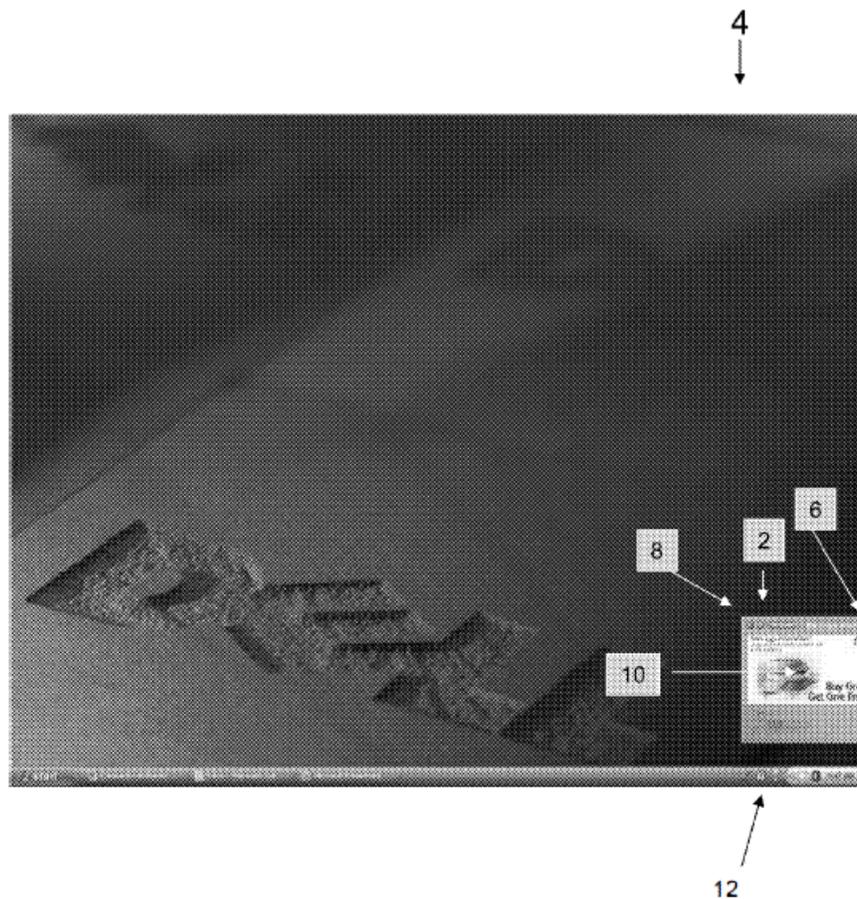


Figure 1

Figure 1 illustrates virtual desktop 4 with applet 2 displayed in the lower right hand corner, containing product or brand logo 10. *Id.* at 5:25–28, 5:54–56. Exemplary applets are described:

Each applet may be designed to be uniform in nature and roughly 1.5 x 1.5 in. area, or alternatively, may be uniquely shaped or sized. . . .

. . . .

Although the applet does present itself to the user periodically, it is non-invasive in the sense that a user knows that it will be

presented, but does not take over the cursor or interrupt the user's interaction with the active application.

. . . .  
[The user] is merely notified by a non-obtrusive small sized applet 2 that is deployed in a predetermined location on the virtual desktop 4 and that does not interrupt that user's activities on the user's device. . . .

*Id.* at 3:16–18, 3:41–44, 6:23–26.

The applets are presented to the user by means of an “applet application” residing on the user's networked device, which is downloaded by a participating user via a network connection from a server (referred to as a “campaign deployment and tracking system” (CPT System 40 in Figure 3)) that administers the advertisement distribution campaign. *Id.* at Fig. 3, 4:19–22, 6:27–31, 6:63–7:1. After the applet application is installed on the user device, specific advertisements and the like may be deployed from the server to the applet application and displayed in an applet — the particular selected advertisement is based on matching geographic and demographic information in a user database with advertisement delivery criteria — *i.e.*, “segmentation requirements,” such as zip code. *Id.* at Fig. 3 (“Match & Deploy System 62”), 3:25–36, 5:65–6:3, 11:17–20.

While an applet is deployed, a user may select it (e.g., by “clicking” on it), thereby launching a browser with additional advertising content related to the applet, and optionally dismissing the displayed applet. *Id.* at Fig. 2, 3:55–63, 6:38–48.

*B. Representative Claim*

Challenged independent claim 1 is illustrative of the subject matter of the challenged claims and is reproduced below.<sup>2</sup>

1. A system for delivering information to a networked device of a user, the system comprising:
  - a microprocessor running a software application for delivering an applet application to the networked device and managing the delivery of the applet application to the networked device, wherein the applet application passively deploys one or more applets at a time of deployment,
  - wherein the applet application provides for delivery of content to the networked device and a display of the content in a predetermined portion of a user display that is less than an entire display of the networked device, by the one or more applets,
  - wherein the one or more applet is configured to deploy at least one of independent of or in conjunction with an internet browser window,
  - wherein an internet browser is configured to deploy subsequent to deployment of the one or more applets based on at least one action or inaction of the user,
  - wherein at least one of the applets is configured to become idle upon deployment of the internet browser, and
  - wherein the deployment of the one or more applets is such that at the time of deployment of the

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<sup>2</sup> For convenience of presentation, we adopt Petitioner’s organization of the “wherein” clauses of claim 1 into separate paragraphs. *See* Pet. 6–7.

one or more applets the user can continue to operate the networked device in a state prior to the deployment of the one or more applets;

a first database coupled to the microprocessor and storing a first set of information relating to the user; and

a second database coupled to the microprocessor and including a second set of information for comparison to the first set of information,

wherein the microprocessor compares the first set of information to the second set of information to determine whether the content should be transmitted to the networked device for display by the one or more applets.

Ex. 1001, 14:9–43.

### *C. Prior Art Relied Upon*

Petitioner relies upon the following prior art references (Pet. 8–14, 77–78):

U.S. Patent Application Publication No. 2002/0083138 A1, June 27, 2002, to Wilson et al. (“Wilson”). Ex. 1005.

U.S. Patent Application Publication No. 2006/0085758 A1, Apr. 20, 2006, to Backus (“Backus”). Ex. 1006.

U.S. Patent Application Publication No. 2006/0053048 A1, Mar. 9, 2006, to Tandetnik (“Tandetnik”). Ex. 1007.

U.S. Patent Application Publication No. 2002/0120518 A1, Aug. 29, 2002, to Carney et al. (“Carney”). Ex. 1018.

Petitioner also relies on the declarations of Craig Rosenberg (“Rosenberg Decl.”). Ex. 1003.

*D. Asserted Grounds of Unpatentability*

Petitioner challenges claims 1, 3, 7–9, 14, 18–20, 22, 24, 25, 29–31, 33, and 35–37 on the following grounds of unpatentability (Pet. 8, 76)<sup>3</sup>:

<b>Claim(s)</b>	<b>References/Basis</b>	<b>35 U.S.C. §</b>
1, 3, 7–9, 14, 18–20, 22, 24, 25, 29–31, 33, 35–37	Wilson, Backus, Tandetnik	103(a)
1, 3, 7–9, 14, 18–20, 22, 24, 25, 29–31, 33, 35–37	Wilson, Backus, Tandetnik, Carney	103(a)

*E. Real Parties in Interest*

Petitioner identifies Fidelity Information Services, LLC, and Fidelity National Information Services, Inc., as real parties in interest. Pet. 79.

Patent Owner identifies itself as the real party in interest. Paper 22, 2.

*F. Related Matters*

The parties identify the following cases that may affect or be affected by a decision in this proceeding: *Groove Digital, Inc. v. United Bank*, 1:18-cv-00966 (E.D. Va.); *Groove Digital, Inc. v. King.com, Ltd.*, 1:18-cv-00836 (D. Del.); and *Groove Digital, Inc. v. Jam City, Inc.*, 1:18-cv-01331 (D. Del.). Pet. 80; Paper 22, 2.

In addition, Petitioner filed a Petition in IPR2019-00193, challenging claims 2, 4–6, 10–13, 15–17, 21, 23, 26–28, 32, and 34 of the '762 patent.

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<sup>3</sup> The Leahy-Smith America Invents Act (“AIA”) included revisions to 35 U.S.C. §§ 102 and 103 that became effective after the filing of the application for the '762 patent. Therefore, we apply the pre-AIA versions of these sections.

See Paper 4, 2; *Fidelity Info. Servs., LLC v. Groove Digital, Inc.*, IPR2019-00193, Paper 2, 1 (PTAB Nov. 8, 2018) (Institution Decision).

### III. ANALYSIS

#### *A. Legal Standards — Obviousness*

A claim is unpatentable under 35 U.S.C. § 103(a) if the differences between the claimed subject matter and the prior art are such that the subject matter, as a whole, would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007).

The question of obviousness is resolved on the basis of underlying factual determinations, including (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of skill in the art; and (4) where in evidence, so-called secondary considerations, including commercial success, long-felt but unsolved needs, failure of others, and unexpected results (“the *Graham* factors”).<sup>4</sup> *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

If the claimed subject matter cannot be fairly characterized as involving the simple substitution of one known element for another or the mere application of a known technique to a piece of prior art ready for the improvement, a holding of obviousness can be based on a showing that “there was an apparent reason to combine the known elements in the fashion claimed.” *KSR*, 550 U.S. at 418. Such a showing requires “some articulated

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<sup>4</sup> Patent Owner does not rely on any evidence of secondary considerations. See generally PO Resp.; PO Sur-Reply.

reasoning with some rational underpinning to support the legal conclusion of obviousness.” *Id.* (quoting *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)).

In general, obviousness entails an inquiry that is “expansive and flexible” and takes into account “the inferences and creative steps that a person of ordinary skill in the art would employ” when presented with the teachings of the prior art. *KSR*, 550 U.S. at 415–18. Under this flexible approach, it can be important to identify “a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements” in the way claimed. *Takeda Chem. Ind., Ltd. v. Alphapharm Pty., Ltd.*, 492 F.3d 1350, 1356–57 (Fed. Cir. 2007). Such reason may be found “explicitly or implicitly in market forces; design incentives; the interrelated teachings of multiple patents; any need or problem known in the field of endeavor at the time of invention and addressed by the patent; and the background knowledge, creativity, and common sense of the person of ordinary skill.” *ZUP, LLC v. Nash Mfg., Inc.*, 896 F.3d 1365, 1371 (Fed. Cir. 2018) (internal quotations and citations omitted); *see also KSR*, 550 U.S. at 419–20. Moreover, ““if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill.”” *Unwired Planet, LLC v. Google Inc.*, 841 F.3d 995, 1003 (Fed. Cir. 2016) (quoting *KSR*, 550 U.S. at 417).

“[A] combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” *KSR*, 550 U.S. at 416. “[I]n many cases a person of ordinary skill will be able to fit the teachings of multiple patents together like pieces of a

puzzle. . . . A person of ordinary skill is also a person of ordinary creativity, not an automaton.” *Id.* at 420–421.

“The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference . . . . Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art.” *In re Keller*, 642 F.2d 413, 425 (CCPA 1981). “Combining the *teachings* of references does not involve an ability to combine their specific structures.” *In re Nievelt*, 482 F.2d 965, 968 (CCPA 1973).

#### *B. Level of Ordinary Skill in the Art*

Petitioner’s declarant opines:

[A] person of ordinary skill in the art of the ’762 patent as of its filing date, would have been someone knowledgeable in computer systems, graphical user interfaces, and electronic alerts. . . . [T]hat person would have at least a Bachelor’s Degree in Computer or Electrical Engineering, Computer Science, Human Factors, or equivalent engineering discipline with a specialization in computer-human interaction and user interfaces, or equivalent training; and approximately three years of experience working on graphical user interfaces for computer systems, including experience with electronic alerts.

Rosenberg Decl. ¶ 42. Patent Owner “adopts petitioner’s definition of the POSA.” PO Resp. 4.

We find this agreed-to proposal consistent with the level of ordinary skill in the art reflected in the disclosure of the ’762 patent and the prior art of record. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001); *In re GPAC Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995).

### C. Claim Construction

For an IPR based on a petition filed before November 13, 2018, as here, the Board interprets claims of an unexpired patent using the broadest reasonable construction in light of the specification of the patent in which they appear. *See* 37 C.F.R. § 42.100(b) (2018); *Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2144–46 (2016) (upholding the use of the broadest reasonable interpretation standard). The broadest reasonable construction is an interpretation that corresponds with how the inventor describes his invention in the specification, *i.e.*, an interpretation that is “consistent with the specification.” *In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997) (citation and internal quotation marks omitted); *see also In re Suitco Surface Inc.*, 603 F.3d 1255, 1259–60 (Fed. Cir. 2010). An inventor may provide a meaning for a term that is different from its ordinary meaning by defining the term in the specification with reasonable clarity, deliberateness, and precision. *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994). Otherwise, terms are given their ordinary and customary meaning, as would have been understood by one of ordinary skill in the art at the time of the invention. *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007.) We need only construe terms “that are in controversy, and only to the extent necessary to resolve the controversy.” *Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co. Ltd.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017).

Petitioner states that it “applied the plain and ordinary meaning of the terms” of the claims.<sup>5</sup> Pet. 8; *see also* Rosenberg Decl. ¶¶ 46, 47. However,

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<sup>5</sup> Petitioner asserts an alternative obviousness ground, based on the combination of Wilson, Backus, Tandetnik, and Carney, “[i]f Patent Owner argues and/or the Board determines that the ‘comparing’ elements [of the

for the claim term “applet,” Petitioner proposes that the term be construed as defined in the statement in the ’762 patent that “the present invention provides an applet (also known as an alert or notification).” *E.g.*, Pet. 22; Rosenberg Decl. ¶ 100; *see* Ex. 1001, 5:16–17. In its Preliminary Response, Patent Owner disputed construing “applet” as “an alert or notification” as “overbroad and unsupported.” Prelim. Resp. 3–10. We nevertheless concluded that “applet” should be construed as “an alert or notification.” Institution Dec. 11. Patent Owner has not pressed this issue post-institution. *See generally* PO Resp. For the reasons explained in our Institution Decision, including the fact that the ’762 patent states that an applet is “also known as an alert or notification,” we adhere to this construction. Ex. 1001, 5:17.

For the claim terms “deploy,” “deploys,” and “deployment,” Patent Owner asserts that the ’762 patent “defines [those terms] as ‘launch for interaction with a user or make active for user interaction something that was previously inactive.’” PO Resp. 4 (citing Ex. 1001, Fig. 1, 3:1–6, 3:45–50, 4:34–40, 5:41–45, 6:48–49, 6:50–54). In fact, the ’762 patent contains no such definition, and it is not necessary to construe these terms in order to determine the patentability issues discussed below.

#### *D. The Prior Art Status of Backus and Tandetnik*

The applications for Tandetnik and Backus were filed September 7 and October 18, 2004, respectively, and published March 9, 2006 and April

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claims] should be construed to require ‘geotargeting’ to determine the content sent to the users. . . .” Pet. 76. We discuss this alternative ground in Section III.F. below.

IPR2019-00050  
Patent 9,454,762 B2

20, 2006, respectively. Ex. 1007, code (22); Ex. 1006, code (22). The earliest priority date for the '762 patent is the provisional application filing date, March 18, 2005. Ex. 1001, code (60). Thus, at most, Backus and Tandetnik would qualify as prior art under 35 U.S.C. § 102(e). However, Patent Owner asserts that the subject matter of the '762 patent claims was conceived by August 13, 2004, and diligently reduced to practice, thus antedating the references. PO Resp. 29–59.

Section 102(e) bars a patent where the claimed invention was described in “an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent.” The date of invention is the date of reduction to practice “unless the . . . party can show that it was the first to conceive the invention and that it exercised reasonable diligence in later reducing that invention to practice.” *Mahurkar v. C.R. Bard, Inc.*, 79 F.3d 1572, 1577 (Fed. Cir. 1996).

Patent Owner contends that the inventors conceived of the invention prior to the filing dates of Tandetnik and Backus, and exercised reasonable diligence in later reducing that invention to practice. PO Resp. 29. For reduction to practice, in its Patent Owner Response, Patent Owner asserts that “[t]he invention was constructively reduced to practice with reasonably continuous diligence from at least prior to September 7, 2004, through actual reduction to practice January or February, 2005, and constructive reduction to practice on March 18, 2005,” — the filing date of the provisional application related to the '762 patent. *Id.* at 34; Ex. 1001, code (60); Ex. 3001, 1 (date stamp). In its Sur-Reply, Patent Owner clarifies that it “relies on the evidence relating to actual reduction to practice only in connection with diligence towards constructive reduction to practice on March 18,

2005”; and during the oral hearing, Patent Owner confirmed “we’re not claiming actual reduction to practice . . . . [n]ot an issue here.” PO Sur-Reply 21; Paper 62, 50:18–23. Patent Owner thus would tack together two phases of diligence: diligence towards actual reduction to practice from September 7, 2004 to February 2004 (notwithstanding that actual reduction to practice is not relied on), and diligence towards constructive reduction to practice from February 2004 to the filing of the provisional application. PO Resp. 34–47. There is no dispute that, in principle, a patent owner is entitled to rely on periods of diligence related to both actual and constructive reduction to practice to antedate references. Paper 62, 58:7–24. *C.f.*, *Gould v. Schawlow*, 363 F.2d 908, 916 (C.C.P.A. 1966) (considering evidence of diligence towards actual reduction to practice from November 1957 to December 1958 and evidence of diligence towards constructive reduction to practice December 1958 to April 1959); *and see ATI Techs. ULC v. Iancu*, 920 F.3d 1362, 1369, 1372–75 (Fed. Cir. 2019) (references antedated by showing of diligence towards actual reduction to practice up to the date of constructive reduction to practice).

### *1. Motion To Exclude Inventor Testimony*

In support of antedating Backus and Tandetnik, Patent Owner relies on the declaration and oral hearing testimony of Samuel Gaidemak, a named inventor of the ’762 patent. PO Resp. 29–42, 48–59; Ex. 2030; Paper 62, 7:15–35:23. Petitioner moves to exclude the portion of Mr. Gaidemak’s declaration comparing ’762 patent claims 1–13 to Patent Owner’s evidence of conception. Paper 54; Ex. 2030 ¶ 46, Table 1. Petitioner argues that Mr. Gaidemak is not qualified as an expert in the pertinent field of the invention,

and is not a person of ordinary skill the art as defined by the parties (which we have adopted as discussed above). Paper 54, 3–5. Petitioner also objected to portions of Mr. Gaidemak’s oral hearing testimony as improperly introducing new argument and evidence. Paper 62, 12:7–13:12, 18:8–23, 21:3–22:23, 23:20–24:2, 28:13–29:3.

We agree that Mr. Gaidemak is not qualified as an expert in the field, and does not fit the applicable description of a person of ordinary skill in the art. Nonetheless, although Mr. Gaidemak has admitted that he was not a “technology guy,” he nonetheless testified as to his familiarity and experience, from a marketing standpoint, with the browser, user interface, and database technology pertinent to the ’762 patent. Paper 62, 9:20–12:2, 30:13–32:17. We are satisfied that Mr. Gaidemak has personal knowledge of at least some aspects of the claimed invention, including its alleged conception and diligence towards reduction to practice, and that his testimony is admissible to the extent it is helpful. *See Verizon Servs. Corp. v. Cox Fibernet Va., Inc.*, 602 F.3d 1325, 1339-40 (Fed. Cir. 2010) (district court properly allowed testimony from the witnesses about the patents they invented based on their personal knowledge). In addition, the testimony elicited during the oral hearing was reasonably within the scope of our January 9, 2020 Order permitting live testimony of Mr. Gaidemak as to certain topics during the oral hearing. Paper 51. Therefore we overrule those objections.

Because an *inter partes* trial is before factfinders rather than a jury, the risk that a decision will be unfairly affected by the admission of arguably unqualified testimony is far less than in a jury trial. *See, e.g., E.E.O.C. v. Farmer Bros. Co.*, 31 F.3d 891, 898 (9th Cir. 1994). The Board is capable

of assessing the probative value of Mr. Gaidemak’s testimony and giving it proper weight, and we have done so here, as discussed further below.

For the foregoing reasons, Petitioner’s Motion to Exclude is denied, and its objections during the oral hearing are overruled.

## 2. *Conception*

Patent Owner cites three documents (hereafter, the “conception documents”) as evidence of conception of the subject matter of the ’762 patent claims: a document titled “Local Toast” with a footer that includes the date “8/13/2004” (Ex. 2003) (hereafter, “Local Toast”); a block diagram titled “Ugo Local Architecture” with metadata indicating a “Last Modified” date of “8/11/2004” (Ex. 2004) (hereafter, “Local Architecture”); and a document titled “Toast Architecture Addendum” with metadata indicating a “Last Modified” date of “8/13/2004” (Ex. 2005) (hereafter, “Toast Architecture Addendum”). PO Resp. 30–31.<sup>6</sup> Both “Local Toast” and “Ugo Local” refer to a development project which Patent Owner asserts led to the inventions claimed in the ’762 patent. PO Resp. 30–31; Ex. 2030 ¶¶ 4, 6, 46; *see also* Ex. 1001, Figs. 8, 9, 11 (“2005 Toast Web Site,” “2005 Toast Application,” “Toaster Administration Center”).

Conception is the formation “in the mind of the inventor of a definite and permanent idea of the complete and operative invention, as it is therefore to be applied in practice.” *Coleman v. Dines*, 754 F.2d 353, 359 (Fed. Cir. 1985) (quoting *Gunter v. Stream*, 573 F.2d 77, 80 (CCPA 1978))

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<sup>6</sup> As discussed below, Patent Owner also relies on additional documents and testimony to corroborate conception. PO Resp. 30–34, 42–43; Exs. 2006–2018, 2040.

(emphasis omitted). Conception must include every feature or limitation of the claimed invention. *Kridl v. McCormick*, 105 F.3d 1446, 1449 (Fed. Cir. 1997) (citing *Davis v. Reddy*, 620 F.2d 885, 889 (CCPA 1980)).

“Conception must be proved by corroborating evidence which shows that the inventor disclosed to others his ‘complete thought expressed in such clear terms as to enable those skilled in the art’ to make the invention.” *Coleman*, 754 F.2d at 359 (quoting *Field v. Knowles*, 183 F.2d 593, 601 (CCPA 1950)). However, “there is no final single formula that must be followed in proving corroboration.” *Berry v. Webb*, 412 F.2d 261, 266 (CCPA 1969). Rather, the sufficiency of corroborative evidence is determined by the “rule of reason.” *Price v. Symsek*, 988 F.2d 1187, 1195 (Fed. Cir. 1993); *Berry*, 412 F.2d at 266. Accordingly, a tribunal must make a reasonable analysis of all of the pertinent evidence to determine whether the inventor’s testimony is credible. *Price*, 988 F.2d at 1195. The tribunal must also bear in mind the purpose of corroboration, which is to prevent fraud, by providing independent confirmation of the inventor’s testimony. *See Berry*, 412 F.2d at 266, (“The purpose of the rule requiring corroboration is to prevent fraud.”); *Reese v. Hurst*, 661 F.2d 1222 (CCPA 1981) (“[E]vidence of corroboration must not depend solely on the inventor himself.”).

*a) Date of Conception*

An initial issue is whether the record supports Patent Owner’s contention that the date of conception (as opposed to the subject matter that was conceived) is August 13, 2004. PO Resp. 30. The Local Toast document has the date, “8/13/2004,” in its footer. Ex. 2003. Mr. Gaidemak

testified that he inserted this date in the document at the time he completed it in accord with his practice. Ex. 2030 ¶ 7. The Local Architecture and Toast Architecture Addendum documents have “Last Modified” dates in their metadata of “8/11/2004” and “8/13/2004,” respectively. Exs. 2004, 2005. Mr. Gaidemak testified that the metadata printouts included in these latter two exhibits pertain to the associated documents. Ex. 2030 ¶¶ 8–9.

Patent Owner also submits emails dated from July 22 through July 26, 2004, exchanged between Mr. Gaidemak, co-inventor Paul Chachko, and Ravi Yadav, a director of the company employing the inventors, which broadly refer to, discuss, and schedule meetings relating to, the “Toast” concept, which Mr. Gaidemak testified pertain to the same subject matter as the conception documents. PO Resp. 31–33 (citing Exs. 2006–2011); Ex. 2030 ¶¶ 10–15. These emails include references to various attachments (but do not include the attachments), and refer to the occurrence of a “brainstorming session” and other meetings, the use of browser technology, and the need for documentation and nondisclosure agreements. *Id.* In addition, Patent Owner submits different versions of the Local Toast document, also with dates in the footer, which dates span August 2–5, 2004, and which Mr. Gaidemak testified were also inserted by him at the time they were completed. PO Resp. 33–34 (citing Exs. 2013–2016, 2018); Ex. 2030 ¶¶ 17–22. Patent Owner also submits a prior version of the Local Architecture document. Ex. 2017.

Petitioner states that it does not challenge the authenticity of any of these conception and conception-related documents, but nonetheless challenges the dates attributed to them by Patent Owner, based on lack of independent corroboration. Pet. Reply 12–14; Paper 62, 44:4–16. We take

from this that, other than the dates, Petitioner does not challenge that the documents are what they appear to be insofar as authorship and subject matter are concerned. Nor is there anything in the record to suggest otherwise. However, we agree with Petitioner that the record does not support an August 13, 2004 conception date.

Regarding the Local Toast document and its earlier versions, we cannot accord any meaningful evidentiary weight to the dates inserted into the footers by Mr. Gaidemak. Other than Mr. Gaidemak, no witness or document independently corroborates any of these dates. “It is well established . . . that when a party seeks to prove conception through an inventor’s testimony the party must proffer evidence, ‘in addition to [the inventor’s] own statements and documents,’ corroborating the inventor’s testimony.” *Apator Miitors ApS v. Kamstrup A/S*, 887 F.3d 1293, 1295 (2018). “Even under the ‘rule of reason’ analysis . . . the ‘evidence of corroboration must not depend solely on the inventor himself.’” *Id.* (quoting *Cooper v. Goldfarb*, 154 F.3d 1321, 1330 (Fed. Cir. 1998)). “Even the most credible inventor testimony is *a fortiori* required to be corroborated by independent evidence.” *Medichem, S.A. v. Rolabo, S.L.*, 437 F.3d 1157, 1171–72 (Fed. Cir. 2006); *see also Brown v. Barbacid*, 276 F.3d 1327, 1335 (Fed. Cir. 2002) (“The Board did not err in holding that an inventor’s own unwitnessed documentation does not corroborate an inventor’s testimony about inventive facts.”); *Medichem, S.A.*, 437 F.3d at 1172 (unwitnessed inventor notebooks had “minimum corroborative value” because they did “not provide an ‘independent’ source of authority”).

Nor are the “Last Modified” dates in the metadata of the Local Architecture diagram and the Toast Architecture Addendum sufficient

evidence of conception date. There is no evidence in the record via testimony or documents that someone other than Mr. Gaidemak saw these documents on or near the attributed dates. The body of the documents, which appear to be draft Excel and Word documents, respectively, do not have any indication of when they were prepared, such as by referencing some upcoming event. *See* Ex. 2004, 1; Ex. 2005, 1–5. The pathname sections of the metadata are redacted, and there is nothing else in the record to indicate who controlled the documents since their asserted creation date, and the degree of reliability that should be accorded the metadata. *See* Ex. 2004, 2; Ex. 2005, 6. Nor is there corroborating evidence in the record that Mr. Gaidemak conceived of the features referenced in these documents on or around August 13, 2004. Patent Owner thus does not provide independent corroboration of the dates appearing in the metadata of these documents.

Patent Owner cites *ATI Technologies*, 920 F.3d at 1371, as finding that metadata can be considered as a factor in a rule-of-reason analysis. PO Sur-Reply 13. We agree in principle, but the circumstances of that case stand in stark contrast to those present here: (i) the record included “almost 1300” pages of documentary records showing the work done and by whom and when, including metadata, document logs, and folder histories; (ii) the metadata was generated by over one hundred project managers/designers; and (iii) “the employees were required to save their work in a revision-control system . . . that maintains metadata . . . .” *Id.* at 1370. Thus, in view of the totality of the evidence, the metadata used to corroborate the inventor’s testimony in *ATI* was more persuasive and reliable than the “Last modified” dates in the metadata of the Local Architecture diagram and the Toast Architecture Addendum.

More applicable to the case at hand is *EMC Corp. v. Pure Storage, Inc.*, 204 F.Supp.3d 749, 761–62 (D. Del. 2016). In that case, whiteboard photographs were held not to be independently corroborative of the inventor’s testimony because the inventor took the photographs and had control of the camera, the photograph file names, and the metadata. *Id.*; see also *Transocean Offshore Deepwater Drilling, Inc. v. GlobalSantaFe Corp.*, 443 F.Supp.2d 836, 856 (S.D. Tex. 2006) (holding that an inventor’s testimony that he made electronic drawings of an invention before the ‘Last Modified Date’ of the files required corroboration and that his testimony that ‘[e]ach of the drawing files on the disks have a “Last Modified Date” in the electronic directory showing the last time the drawing was changed’ was insufficient to corroborate the date because of the lack of ‘evidence that the drawings were contemporaneously disclosed to or witnessed by anyone else’’). Similar facts were considered in *Kenexa Brassring, Inc. v. Taleo Corp.*, 751 F.Supp.2d 735, 760–61 (D. Del. 2010):

Defendants’ evidence is insufficient to demonstrate . . . conception and reduction to practice before the priority date . . . . [The inventor’s] timestamped source code files fail to provide sufficient independent corroboration. While the source code undoubtedly shows the functionality . . . it is akin to an unwitnessed inventor’s notebook. . . . The source code files themselves were written by [the inventor]. In addition, timestamps can be easily modified, even accidentally. A user can modify the time stamp on a source code file by simply changing the system time on a development computer and making a trivial modification to the file. . . . Indeed, numerous applications exist to change the timestamp on a file regardless of the time on a computer’s system clock.

In addition to the three documents (the Local Toast document, Local Architecture diagram, and Toast Architecture Addendum) that Patent Owner

offers as evidence of conception of the subject matter of the '762 patent claims, Patent Owner offers additional emails (Exhibits 2006–2011) as corroborating the date of conception under the “rule of reason,” emphasizing that “the evidence “must be considered as a whole, not individually,” citing *NFC Tech., LLC v. Matal*, 871 F.3d 1367, 1372 (Fed. Cir. 2017). PO Sur-Reply 10–11. Given the fact that Petitioner does not challenge the authenticity of these emails, we assume for these purposes that they correctly identify the author and recipients, and were sent on the dates indicated — the date information does not appear to have the same level of unreliability as we have determined for dates inserted in the footers of the Local Toast documents or the dates appearing in metadata of the Local Architecture diagram and Toast Architecture Addendum.

Upon considering this evidence, together with the record as a whole, we conclude that nothing in the emails corroborates the dates of the proffered conception documents or otherwise amounts to reliable evidence of the date of conception, aside from the filing date of the provisional patent application. The emails are unlike the corroborating evidence considered in *NFC*, which included a data sheet, PCB layouts, test results, and a wiring diagram evidencing conception and reduction to practice. 871 F.3d at 1369–70. The emails Patent Owner relies on are similar to those considered in *Aptor*. In that case, emails included such statements as: “I have found the basis for the mechanical assembly”; “[a] sample is attached”; and “I’m sending [the latest presentation] to you here.” *Aptor*, 887 F.3d at 1296. However, “[n]one of the emails themselves indicate what file was attached or what such attachment disclosed.” *Id.* The inventor submitted a declaration identifying the attachments. *Id.* However, the Court held:

The evidence proffered by [the inventor] is stuck in a catch-22 of corroboration: Apator attempts to corroborate [the inventor's] testimony with the emails and the drawings, but the emails and drawings can only provide that corroboration with help from [the inventor's] testimony. . . . “[I]t would be strange indeed to say that [an inventor], who filed the . . . affidavit that needs corroborating, can by his own testimony provide that corroboration.”

*Apator*, 887 F.3d at 1296–97 (citation omitted).

Similarly, here the emails contain such statements as “Here’s my idea,” “this will give you an idea of the concept,” “the idea . . . has great potential,” and “it’s nothing more than a good idea at this point,” but there is only limited information as to the actual content of the ideas, and no identification of documents to which the emails refer. Exs. 2006–2011. The only relationship to the actual conception documents or details that can be tied to these emails is, at most, provided by the inventor’s uncorroborated bootstrapping testimony. Ex. 2030 ¶¶ 10–15. Accordingly, the “rule of reason” analysis is of no avail to Patent Owner — these emails do not provide evidentiary support of the conception date.

Patent Owner also cites *Brown, supra*, 276 F.3d at 1337, as authority that “physical evidence requires no further corroboration to demonstrate the content of the physical evidence itself.” PO Sur-Reply 12. To the extent Patent Owner is arguing that a date on a “physical document” authored by the inventor and undisclosed to others does not need corroboration, the law is to the contrary. *Brown*, 276 F.3d at 1335 (“The Board did not err in holding that an inventor’s own unwitnessed documentation does not corroborate an inventor’s testimony about inventive facts.”); *Medichem, S.A.*, 437 F.3d at 1172 (unwitnessed inventor notebooks of “minimum

corroborative value”). In *Brown*, the physical exhibit in question — September 25, 1989 lab notebook pages and autoradiographs — did not need to be corroborated as its technical content: “[T]his physical evidence requires no further corroboration to demonstrate the content of the physical evidence itself.” 276 F.3d at 1337. But the Court required corroborative testimony from a non-inventor witness as to the actual conception date, notwithstanding the September 25 date entered in the physical document:

[W]hile Dr. Casey’s [the non-inventor’s] vague testimony does not corroborate Dr. Reiss’ [the inventor’s] testimony of an actual reduction to practice, Dr. Casey’s testimony certainly suggests that Dr. Reiss had the idea of [the invention] sometime before the end of October or the beginning of November 1989. Thus, Dr. Casey’s independent testimony corroborates Dr. Reiss’ testimony of a conception before November 1989.

*Id.* The Court emphasized that the September 25 lab notebook pages and autoradiographs themselves, along with the independent testimony by Dr. Casey, must be considered to demonstrate the date of conception.<sup>7</sup> *Id.*

Patent Owner also asserts that the conception date is corroborated by the declaration of Paul Sonn, who was the president of D&D Interactive, a company retained to perform website development and programming services for the “Local Toast” project. PO Resp. 42–43; Ex. 2040 ¶¶ 3, 5. Sonn testified that “D&D Interactive” received “some information” from the inventors “shortly after” a nondisclosure agreement was signed on September 1, 2004, although he does not “recall the exact date.” Ex. 2040

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<sup>7</sup> See also *Price*, 988 F.2d at 1195–96, in which the Court held that the technical content of a drawing did not need independent corroboration to show conception, but considered independent witness testimony as to the date of the drawing.

¶ 7. *Separately*, he testified that “Exhibits 2003, 2004, and 2005 are true and correct copies of the written information received by D&D Interactive.” *Id.* Thus, he does not testify when the conception documents were received by D&D, or who at D&D received them. We agree with Petitioner that this testimony does not credibly support the asserted conception date. Pet. Reply 13–14.

In sum, applying the “rule of reason” to the record presented, other than Mr. Gaidemak’s testimony and dates of unproven provenance contained in documents authored by Mr. Gaidemak, there is insufficient corroborative evidence to support Patent Owner’s asserted August 13, 2004 conception date. In any event, even if we determined that the August 13, 2004 date in the footer of Exhibit 2003 and the Last Modified dates of August 13, 2004 and August 11, 2004, respectively, in the metadata of Exhibits 2004 and 2005 were reliable and under a totality of the circumstances Patent Owner showed conception (of some concept) by August 13, 2004, the record does not show conception *of the claimed inventions* by that date, as explained below.

*b) Conception of “Second Database” Requirement*

Petitioner argues that the conception documents (Exhibits 2003, 2004, and 2005) relied on by Patent Owner do not establish conception of the following requirement of independent claims 1 and 36: “a second database coupled to the microprocessor and including a second set of information for comparison to the first set of information.” Pet. Reply 15–17. We agree. The conception documents do disclose the claimed “second set of information” — the use of “segmentation specifics,” also referred to as

“geographic and demographic segmentation,” that are compared to the “User Profiles.” Ex. 2003, 2. However, there is no disclosure that this information is stored in a “second database coupled to the microprocessor,” as required by claims 1 and 36. This stands in contrast to references to the “User Profile” database, which correspond to the claimed “first database.” Ex. 2003, 2; Ex. 2004, 1; Ex. 2005, 1–3, 5. Rather, the conception documents suggest that the segmentation specifics are entered by the user when setting up a campaign, but not retained in storage, whether in a database or otherwise. *E.g.*, Ex. 2003, 2 (“The set-up of . . . geographical and demographic segmentation occurs at this time matching the user database to the segmentation specifics”); Ex. 2004, 1 (“Data Input”).

Patent Owner relies on Mr. Gaidemak’s declaration testimony, which includes a claim chart comparing, *inter alia*, claim 1 to the conception documents. PO Resp. 48; Ex. 2030, Table 1. For the second database limitation, the chart includes extensive quotations from the conception documents alleged to support conception of this limitation. PO Sur-Reply 15; Ex. 2030, 65–73. However, as already stated above, none of the quotations or anything else in the conception documents disclose a database containing the “segmentation specifics” — *i.e.*, the “second set of information.”

Patent Owner argues that the conception documents need not literally use the words, “second database,” because Mr. Gaidemak’s testimony that he had conceived of a second database was credible, and “[c]orroborating evidence need not disclose each and every aspect of the claimed invention.” PO Sur-Reply 16–17 (*quoting Raytheon Co. v. Sony Corp.*, 727 F. App’x 662, 669 (Fed. Cir. 2018)). However, nothing other than unpersuasive

attorney argument is offered in support of *any aspect* of the second database requirement.<sup>8</sup> *Id.* As stated above, there is no suggestion in the conception documents that the segmentation specifics are even retained in storage, let alone in a database. And there is no support for the argument that the need to validate and test campaigns bears any relationship to a second database as claimed. Thus it is irrelevant that “it requires only ordinary skill to store information in a database” (PO Sur-Reply 18) — given that there is no support in the record that the conception documents disclose conception of the need to store the “second set of information” at all, let alone in a database.

During the oral hearing, Mr. Gaidemak testified that specific portions of the conception documents disclosed the second database. Paper 62, 13:20–15:24. Mr. Gaidemak cited:

Toaster [Content Input]: (1c) . . . . These creatives are then uploaded to the toaster. The administrator will have the ability to validate and test the campaign within the toaster. We will need functionality that will allow us to test all campaigns with clients.

*Id.* at 13:24–14:5 (citing Ex. 2005, 1). Mr. Gaidemak testified that “in order to have pre campaign deployment testing, you need to house and store the data, and you need to do it in a database so that everything renders properly.” *Id.* at 14:7–10. On its face, the need for testing does not equate to a need to store the segmentation specifics used for testing, even assuming

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<sup>8</sup> Patent Owner points to Petitioner’s arguments that Wilson teaches the second database requirement even though Wilson does not mention a database in so many words. PO Sur-Reply 18. However, as discussed below, Petitioner’s arguments to this effect in the context of Wilson are also unpersuasive.

that segmentation specifics are needed for testing. There is no corroborative support for Mr. Gaidemak's assertion that the segmentation specifics need to be stored in a database for test purposes.

Mr. Gaidemak also cited:

Reporting and Analytics (4a) . . . . Reporting is flexible and can be customized based on what clients' needs are.

*Id.* at 14:11–15 (citing Ex. 2005, 4). Mr. Gaidemak testified that this reporting capability evidenced the conception of a second database. *Id.* at 14:16–24. Again, there is no independent suggestion in this passage of the need to store segmentation specifics.

Mr. Gaidemak also pointed to a section titled “Toaster Campaign Specifications (1d)” and testified that it “is really talking about the data and things that are stored in the database.” *Id.* at 15:1–5 (citing Ex. 2005, 2). However, this section makes no mention of a database, in contrast to the following section (1e) that specifies that the user profiles are stored in a database. Ex. 2005, 2.

Mr. Gaidemak further testified:

And now let me specifically show you where the database is referenced in Exhibit 2005, page 3, subsection “Toast, 3(a)”.

If we look at the second paragraph, please. “In order for toast to work, it must be installed on the hard drive of a user. Once installed, the application then communicates with the toaster database.”

The database is the toaster database.

Paper 62, 15:10–17. This passage does not disclose anything other than the user profile database already discussed.

In sum, although Mr. Gaidemak testified that the second database was part of the August 13, 2004 conception, there is no independent corroborative evidence, documentary or testimonial, to support that testimony. Petitioner moves to exclude Mr. Gaidemak's testimony because he is not an expert in the pertinent field. Paper 54. We deny that motion for the reasons discussed above, but, in any event, that motion is rendered moot in this context because, even if Mr. Gaidemak is qualified to testify about aspects of his invention, his testimony lacks any corroborative support, and is unpersuasive.

Our determination is supported by the fact that not even the March 18, 2005 provisional application — relied on for constructive reduction to practice — discloses the claimed second database. The deficiencies of the conception documents discussed above equally apply to the provisional application. Significantly, the Abstract of that application provides:

In a system for delivering information to and displaying information on a networked device of a user, a microprocessor is coupled to a *database* and a *memory device*. The microprocessor runs a software application for delivering an applet application to the networked device and managing the delivery of the applet application. The applet application provides for the display of information on the networked device by an applet. *The database stores a first set of information relating to the user, and the memory device includes a second set of information for comparison to the first set of information, and a third set of information for display by the applet.* The microprocessor compares the first set of information to the second set of information to determine whether to transmit the third set of information to the networked device for display by the applet.

Ex. 3001, 23 (emphasis added). In addition, claim 1 of the provisional application includes:

a *database*, the database coupled to the microprocessor and storing a first set of information relating to the user;

a *memory device*, the memory device coupled to the server and including a second set of information for comparison to the first set of information and a third set of information for display by the applet;

wherein the microprocessor compares the first set of information to the second set of information . . . .

Ex. 3001, 45 (emphasis added). The provisional application thus distinguishes between a *database* that *stores* the first set of information and a *memory device* that *includes* the second set of information. This dichotomy strongly supports the inference that, even at the time of alleged constructive reduction to practice, the inventors did not conceive that the second set of information would be stored in a database, but rather entered during the set-up of a campaign and only temporarily held in memory.

Accordingly, the record does not establish by a preponderance of the evidence that the subject matter of the challenged claims that require a second database (*i.e.*, claims 1, 3, 7–9, and 36) was invented prior to the filing dates of Backus and Tandetnik.

*c) Conception of “Independent or in conjunction with” Requirement*

Petitioner also argues that the conception documents relied on by Patent Owner (Exhibits 2003, 2004, and 2005) do not establish conception of the following requirement of independent claims 1, 14, 25, 36, and 37: “wherein the one or more applet is configured to deploy at least one of independent of or in conjunction with an internet browser window.” Pet. Reply 14–15. In its initial response, Patent Owner only cites the disclosure in the conception documents that a micro-browser is launched when the user

clicks on the deployed applet (referred to as “toast” in the documents). PO Resp. 51 (citing Ex. 2003, Summary and Delivery Applet, pp. 1–2; Ex. 2004, orange boxes; Ex. 2005, Toast [Action Taken] 3c); Ex. 2030, 42–46. For example, the Local Toast document discloses the following:

The execution of an ascending movement followed by a descending movement or a series of these movements is called (“Toasting”). Toasting will not disrupt the workflow of the user or compromise the virtual environment which they are interacting in unless or if a user clicks on a piece of toast. This act will cause a micro-browser to launch onto the virtual desk top.

Ex. 2003, 1. This passage, and other portions of the conception documents, evidence conception of the “applet . . . configured to deploy . . . *independent of* . . . an internet browser window” alternative of this claim requirement.

But Petitioner argues that Patent Owner must show conception of both alternatives of this claim limitation — both the alternative where the applet is deployed *independent of* the internet browser window, and where it is deployed *in conjunction with* the internet browser window. Petitioner relies on *In re Stempel*, 241 F.2d 755 (C.C.P.A. 1957); and M.P.E.P. § 715.03 (“a reference or activity which discloses several species of a claimed genus can be overcome directly under 37 CFR 1.131 only by a showing that the applicant completed, prior to the date of the reference or activity, all of the species shown in the reference”). Pet. Reply 14. This principle is applicable here because, as discussed below, the combination of Wilson and Tandetnik teaches both alternatives covered by this claim element.<sup>9</sup> Pet. 33–36.

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<sup>9</sup> As discussed below in connection with obviousness, the prior art reference, Tandetnik, explicitly discloses a notification included in conjunction with a browser window. Ex. 1007 ¶ 34; Rosenberg Decl. ¶¶ 143–145.

For the alternative where the applet is deployed in conjunction with the internet browser window, Patent Owner’s Sur-Reply cites a statement in the conception documents that “[a] piece of toast typically displays an HTML logo of a product or brand for advertising messages of goods and services.” PO Sur-Reply 14. Mr. Gaidemak testified at the oral argument to like effect. Paper 62, 16:1–17:14. However, we are not persuaded that this reference to HTML sufficiently evidences conception of the claim requirement at issue. Patent Owner’s attorney argument and uncorroborated inventor testimony regarding conception of this claim requirement is unpersuasive. Absent persuasive evidence tying the bare reference “HTML” to deployment of an applet in conjunction with an internet browser window, the preponderance of the evidence does not demonstrate the prior conception of this claim requirement.<sup>10</sup>

### 3. *Diligence*

Although we have determined that the preponderance of the evidence does not support the asserted conception date, and does not support conception of all of the claim limitations, for completeness of the record we consider Patent Owner’s evidence of diligence.

For this matter, in order to antedate the prior art, in addition to prior conception of the invention, Patent Owner has elected the option to show “due diligence from *prior to* [the effective prior art date] . . . to the filing of

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<sup>10</sup> Like the “second database” claim requirement, this requirement is also not disclosed in the March 18, 2005 provisional application. At most, that application includes the same vague reference to “display[ing] an HTML logo.” Ex. 3001, 9.

the application [*i.e.*, constructive reduction to practice].” *ATI*, 920 F.3d at 1369 (emphasis added). PO Resp. 34; PO Sur-Reply 21. As stated above, Patent Owner would tack together two time periods, asserting that it was diligent towards actual reduction to practice from September 7, 2004 to February 2004 (notwithstanding actual reduction to practice is not relied on); and diligence towards constructive reduction to practice from February 2004 to the filing of the provisional application on March 18, 2005. PO Resp. 34–42.

As is required for conception, “[a]n inventor’s testimony regarding his reasonable diligence must be corroborated by evidence.” *Perfect Surgical Techniques, Inc. v. Olympus Am., Inc.*, 841 F.3d 1004, 1007 (Fed. Cir. 2016) (citing *Brown*, 436 F.3d at 1380); *see also Price*, 988 F.2d at 1196 (citing *Kendall v. Searles*, 173 F.2d 986, 993 (CCPA 1949)). “A ‘variety of activities’ may corroborate an inventor’s testimony of reasonable diligence and such corroborating evidence is considered ‘as a whole’ under a rule of reason.” *Perfect Surgical*, 841 F.3d at 1007–08 (quoting *Brown*, 436 F.3d at 1380). A party alleging diligence “must account for the entire period during which diligence is required.” *Gould*, 363 F.2d at 919. A patent owner need not prove the inventor continuously exercised reasonable diligence throughout the critical period; it must show there was reasonably continuous diligence. *Perfect Surgical*, 841 F.3d at 1009. An inventor is not required to work on reducing his invention to practice every day during the critical period. *Id.* Also, reduction to practice activities may be carried out by others, as long as they are on behalf of the inventor. *Solvay S.A. v. Honeywell Int’l Inc.*, 742 F.3d 998, 1000 (Fed. Cir. 2014).

For its initial diligence period, directed to efforts towards actual reduction to practice, Patent Owner relies on the work of D&D Interactive (“D&D”), a software programming services provider, retained by the inventors’ employer, Datagence, Inc., to develop the “Local Toast” concept, subsequently referred to as “UpNow.” PO Resp. 34–41; Ex. 2030 ¶¶ 23–42; Ex. 2040 ¶¶ 5–17. After some preliminary meetings to “discuss development philosophies and approaches,” the two companies signed a “Mutual Non-Disclosure Agreement” to exchange information on September 1, 2004. Ex. 2019; Ex. 2030 ¶¶ 23, 24; Ex. 2040 ¶¶ 5, 6.<sup>11</sup> Mr. Gaidemak testifies that he “had one or more meetings” to provide D&D with information on the project, between September 1–29, 2004, and D&D provided a development proposal on September 29, 2004, which included a development schedule that provided for installment payments keyed to development milestones, the first payment due “upon starting development.” Ex. 2020; Ex. 2030 ¶¶ 25–30; Ex. 2040 ¶¶ 7, 8. That first payment was made September 29, 2004. Ex. 2021, 2; Ex. 2030 ¶¶ 33–34. Subsequent installment payments for “Development” were made in December 2004 and January 2005. *Id.*

D&D’s work on the UpNow project involved “coding, alpha and beta testing, and editing of numerous interacting software programs.” Ex. 2040 ¶ 8. An initial work product of the project was the creation of several “site

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<sup>11</sup> For purposes of our Decision, we assume the dates appearing in the documents relied on for diligence are as they appear, given that they are documents that indicate distribution to other than the inventors and that Petitioner does not challenge the authenticity of the documents. Paper 62, 44:4–16.

maps,” titled “2005 Toast Web Site,” “2005 Toast Application,” “Reporting/Tracking Center,” and “Toaster Administration Center,” each dated November 1, 2004. Exs. 2022–2025; Ex. 2030 ¶¶ 35–38; Ex. 2040 ¶¶ 13–16. According to notes provided by Patent Owner, an October 29, 2004 meeting took place between Datagence and D&D to discuss the Toaster Administration Center site map, which notes include references to an “UpNow Applet” and “Micro-Browser,” and state, “When the user clicks on the UpNow applet a micro-browser launches. The UpNow applet remains in view as well. Question: Is this what we want?” and “There will be an UpNow icon in the system tray at all times that the user is logged on.” Ex. 2026, 2; Ex. 2030 ¶ 39.

Patent Owner has also provided a copy of a PowerPoint presentation on the UpNow development, which Mr. Gaidemak testified he authored, with a “Last Modified” date of December 7, 2004 in the metadata. Ex. 2027; Ex. 2030 ¶ 40. The presentation included mock-ups of web pages from an UpNow web site showing, *inter alia*, an applet in the system tray, the deployed applet, and the launching of a micro browser when a user clicks on the applet. Ex. 2027, 34, 39, 44. In addition, screenshots from the Internet Archive dated February 12, 2005 depict pages from the UpNow web site, indicating the ability to download the applet application to a user device, and describing the applet and micro browser operations. Ex. 2028, 2, 5; Ex. 2030 ¶ 42.

Mr. Gaidemak asserts that he “devoted considerable time” had “many meetings” with D&D personnel during the development of UpNow. Ex. 2030 ¶¶ 31, 32. Mr. Sonn of D&D testifies that there were many conversations and interactions between Mr. Gaidemak and D&D personnel.

Ex. 2040 ¶ 10. Mr. Gaidemak also testified that, “I recall that the UpNow system was developed and launched during January or February 2005.” Ex. 2030 ¶ 41.<sup>12</sup>

For the second diligence period, directed to the filing of the March 18, 2005 provisional application, Patent Owner relies on a December 8, 2004 proposed retainer agreement from Kenyon & Kenyon, which was not entered into. Ex. 2029; Ex. 2030 ¶ 43. Patent Owner also relies on emails dated February 22 through March 14, 2005, between Mr. Gaidemak and Joel Bock, the patent attorney who ultimately did prepare and file the application, which led to the retention of Mr. Bock. PO Resp. 41–42; Exs. 2051, 2052; Ex. 2030 ¶ 45; Ex. 2050 ¶¶ 2–8. Patent Owner also submits emails dated March 14–18, 2005, between Mr. Gaidemak and Mr. Bock, reflecting providing drawings and other documents for preparation of the application, and Patent Owner’s review of the draft application. Exs. 2053–2056; Ex. 2030 ¶ 45; Ex. 2050 ¶¶ 9–11.

Petitioner argues the D&D development of the UpNow project is not evidence of diligence because UpNow did not embody the “second database” or the “the applets . . . configured to become idle upon deployment of the internet browser” requirements of the claims. Pet. Reply 19–22. We agree — as discussed above, nothing in the record suggests that the inventors contemplated the second database during the pertinent time period. Also, although the conception documents (regardless of their date)

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<sup>12</sup> As discussed above, despite initial assertions otherwise, Patent Owner does not continue to argue that the claimed invention was actually reduced to practice in January or February 2005. PO Sur-Reply 21; Paper 62, 50:18–23.

evidence conception of the “become idle” requirement, the UpNow development was directed to the opposite — “When the user clicks on the UpNow applet a micro-browser launches. The UpNow applet remains in view as well.” Pet. Reply 20–21; Ex. 2026, 2; Ex. 2027, 46. *See Naber v. Cricchi*, 567 F.2d 382, 385 (CCPA 1977) (to show reasonable diligence, “the work relied on must ordinarily be directly related to reduction to practice of the invention”).

Petitioner also argues that Patent Owner fails to establish reasonably continuous diligence during the period at issue, citing numerous gaps in the diligence narrative. Pet. Reply 22–30. First, as discussed above, the documents indicate that the D&D development began September 29, 2004, well after the September 7, 2004 priority date of Tandetnik. Pet. Reply 23, n. 7; Ex. 2020, 3 (first payment due “Upon starting development”; Ex. 2021, 2 (first payment made September 29, 2004).

Second, Petitioner argues that even if the diligence period were deemed to start September 1, 2004, when the Mutual Non-Disclosure Agreement was signed, there is only the generalized testimony that “one or more meetings took place” between September 1 and September 29. Ex. 2030 ¶ 25; Ex. 2040 ¶ 7.

Third, after September 29, the next documented activity was an October 29, 2004 meeting to discuss a site map, together with copies of that site map, and three others, dated November 1, 2004. Petitioner contends that there is no specific testimony as to the significance of the site maps or how long it took to prepare them or when they were prepared. Pet. Reply 26–30; Exs. 2022–2026; Ex. 2030 ¶¶ 35–39. Mr. Sonn of D&D testifies as to “having many conversations and interactions” with Mr. Gaidemak and that

“there were various deliverables to be provided.” Ex. 2040 ¶¶ 10, 12. However, Mr. Sonn provides no details or documents describing or corroborating any alleged activities, such as dates, what was discussed or provided, or whether/how they related to the claimed invention. Pet. Reply 28.

Fourth, the evidence for the remaining period of alleged diligence toward actual reduction to practice consists of an uncorroborated PowerPoint presentation prepared by Mr. Gaidemak dated December 7, 2004, and February 12, 2005 screenshots from the Internet Archive. Exs. 2027, 2028; Ex. 2030 ¶¶ 40, 42. Petitioner argues the presentation by Mr. Gaidemak is not evidence of diligence by D&D on the inventors’ behalf, and that the Internet Archive screenshots do not embody the subject matter of all of the ’762 claim requirements. Pet. Reply 20, 28, n.9.

Finally, Petitioner argues the alleged diligence towards constructive reduction to practice was inadequate because it did not begin until an uncompleted attempt to retain Kenyon & Kenyon on December, 2004, followed by a 70-day lapse before first meeting with the attorney ultimately retained, followed by an 18-day delay before actually retaining the attorney and commencing drafting the application shortly before it was filed. Pet. Reply 30.

Patent Owner argues that Petitioner fails to consider the diligence evidence under the “rule of reason” test, and ignores that diligence does not rigorously require that relevant activity occur on a daily basis during the critical time period. PO Sur-Reply 10–11, 21–26. Patent Owner argues that the documents it submitted to evidence diligence, together with the

testimony of Mr. Sonn of D&D, establish the required reasonably continuous diligence towards constructive reduction to practice. *Id.*

We determine that the preponderance of the evidence does not support reasonably continuous diligence from prior to the priority dates of both references to Patent Owner's constructive reduction to practice. As discussed above, diligence did not start prior to September 7, 2004, the filing date of Tandetnik. But to antedate a reference, diligence must precede the date of the reference. *ATI*, 920 F.3d at 1369. For the period from September 29, 2004 until sometime in January or February, 2005, the record does show that D&D worked on development of the UpNow project, culminating with the web site evidenced in Exhibit 2028. PO Resp. 35–41. However, as discussed above, the UpNow project did not work towards including the “second database” or the “the applets . . . configured to become idle upon deployment of the internet browser” requirements of the claims. Also, as Petitioner argues, there are numerous gaps in the documentation:

- There is only generalized testimony that “one or more meetings took place” between September 1 and September 29. Ex. 2030 ¶ 25; Ex. 2040 ¶ 7.
- The next documented activity was an October 29, 2004 meeting to discuss a site map, but pertinent details or documents supporting reduction to practice are lacking. Pet. Reply 26–30.
- Evidence for the remaining period of alleged diligence through the December 2004 to February 2005 time period also does not provide sufficient details documenting actual reduction to practice of the claimed invention. *Id.*

In sum, for the period that Patent Owner asserts D&D was working on the inventors' behalf, the evidence fails to sufficiently describe the ongoing details of what was done, when it was done, and who did it, to establish corroborated reasonably continuous diligence towards actual reduction to practice of the claimed inventions.

In addition, for the second period directed to constructive reduction to practice, there is an unaccounted-for lapse between the February 15, 2005 website document and the March 14, 2005 retention of the Patent Attorney who prepared the March 18, 2005 provisional application. Exs. 2015–2056; Ex. 2050 ¶¶ 4–12. As early as July 22, 2004, the inventors were urged to “use a patent attorney” to start the patent application process, and started their own patentability search. Exs. 2006, 2011. And yet the attorney who filed the March 18, 2005 provisional application was not retained until March 14, 2005, whereupon he promptly prepared and filed the application.

Although an inventor is entitled to delay seeking to file an application until the invention is further perfected through further research or experimentation, the law encourages the inventor to file as soon as possible, and an inventor delays at his or her own risk. As stated in *Gould*, 363 F.2d at 921:

Congress has wisely provided the same opportunity for the inventor whose attic is his laboratory as for the giants of modern industry to file a patent application and obtain the protection thereby afforded. We are aware of no valid reason why [the inventor] could not have taken advantage of his opportunity to timely file his application and obtain the benefits of a constructive reduction to practice . . . .”

Here, as in *Gould*, the inventors waited too long to start the application process.

#### 4. Summary

The preponderance of the evidence does not support the August 13, 2004 conception date claimed by Patent Owner. Moreover, the evidence does not establish conception of the second database requirement of challenged independent claims 1 and 39, or the “independent or in conjunction with” requirement of all challenged independent claims (claims 1, 14, 25, 36, and 37). Also, the preponderance of the evidence does not show reasonable and continuous diligence towards reduction to practice.<sup>13</sup>

Accordingly, we determine that the preponderance of the evidence does not support Patent Owner’s argument that the invention date of the subject matter of the ’762 patent claims antedates the filing dates of Tandetnik and Backus. Therefore, those references are properly considered as prior art to the challenged ’762 patent claims pursuant to 35 U.S.C. § 102(e).

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<sup>13</sup> Although not argued by Petitioner, for the reasons stated above, the issue of antedating the references arguably is moot, because it does not appear that the March 18, 2005 provisional application was a constructive reduction to practice of the inventions recited in the challenged ’762 patent claims in the first place, because it does not disclose the “second database” or “applet . . . configured to deploy . . . in conjunction with an internet browser” requirements of the claims.

*E. Obviousness of Claims 1, 3, 7–9, 14, 18–20, 22, 24–25, 29–31, 33, and 35–37 Over Wilson, Backus, and Tandetnik*

*1. Wilson*

Wilson, titled “User Interface For Receiving Information Via A Transmission Medium,” issued June 27, 2002 from an application dated December 21, 2000, and is prior art pursuant to 35 U.S.C. § 102(a). Ex. 1005, codes (54), (22), (43). Wilson discloses controlling the downloading of advertisements via a “polite push application,” in which an advertising campaign server sends, over the Internet, the advertisements to resident media applications installed on the personal computers of members who have agreed to receive targeted advertising campaigns. *Id.* at Figs. 1, 2b ¶¶ 1, 23, 30, 37, 42.

Figure 8 of Wilson is reproduced below.

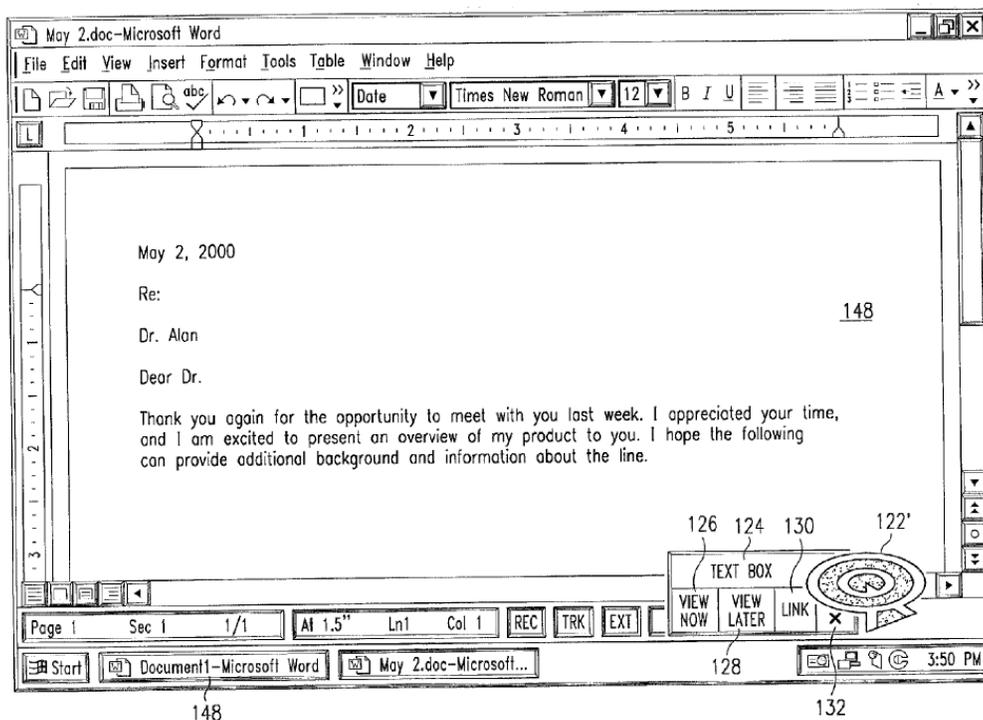
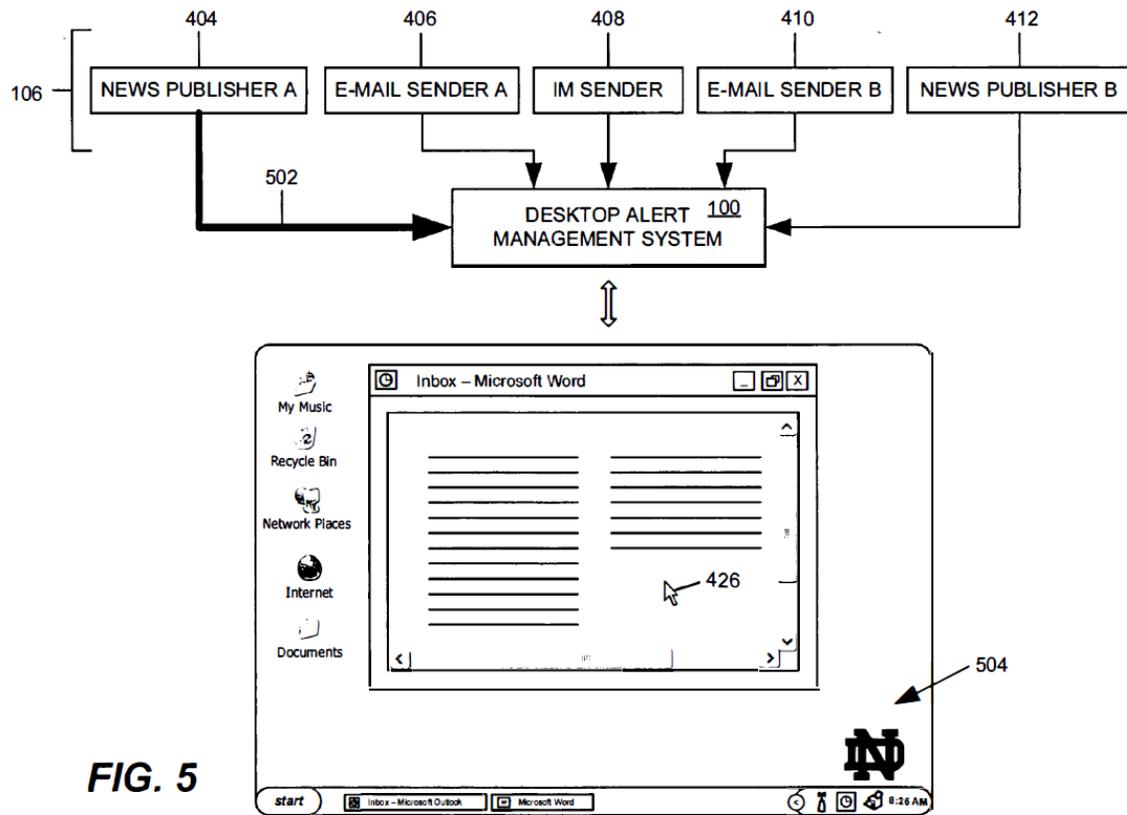


Figure 8 depicts a Microsoft Word application running on a computer display, and a superimposed “pop-up notification icon” and associated user interface 122', which is generated by the resident media application when advertisement content is sent from the advertising campaign server. *Id.*

¶¶ 40–42, 49. A user may click on the “Link” button 130 to open an Internet browser and go to a specified web address. *Id.* at Fig. 5 (“take action” 118) ¶¶ 44, 46. The advertising campaign server sends specific notifications containing advertisement content to the resident media application by comparing a database of audience demographic information to criteria statements for the target audience. *Id.* at Figs. 2a, 3, 4 ¶¶ 30, 39.

## 2. *Backus*

*Backus* is titled “Desktop Alert Management.” Ex. 1006, code (54). As determined above, *Backus* is prior art pursuant to 35 U.S.C. § 102(e). *Backus* discloses a desktop alert management system installed in a computer device which, in response to content sent from sources such as a news publisher, displays an alert informing the user of available content, such as a news item, above other active windows on the display. *Id.* at Abstract ¶¶ 29, 30, 32. Figure 5 of *Backus* is reproduced below.



**FIG. 5**

Figure 5 depicts a display running a Microsoft Word application, with alert graphic 504 generated by desktop alert management system 100 in response to receipt of message 502 from a news publisher 404 (in this example, the graphic indicates news relating to Notre Dame football). *Id.* ¶¶ 41–42. A user can click on the alert graphic to access the content of the message. *Id.* ¶ 42.

### 3. *Tandetnik*

Tandetnik is titled “Techniques For Remotely Delivering Shaped Display Presentations Such As Advertisements To Computing Platforms Over Information Communications Networks.” Ex. 1007, code (54). As determined above, Tandetnik is prior art pursuant to 35 U.S.C. § 102(e). Tandetnik discloses client software installed on computer devices with the

users' permission that displays advertisements from ad servers via the Internet. *Id.* at Fig. 3 ¶¶ 44–47. Figure 1H of Tandetnik is reproduced below.

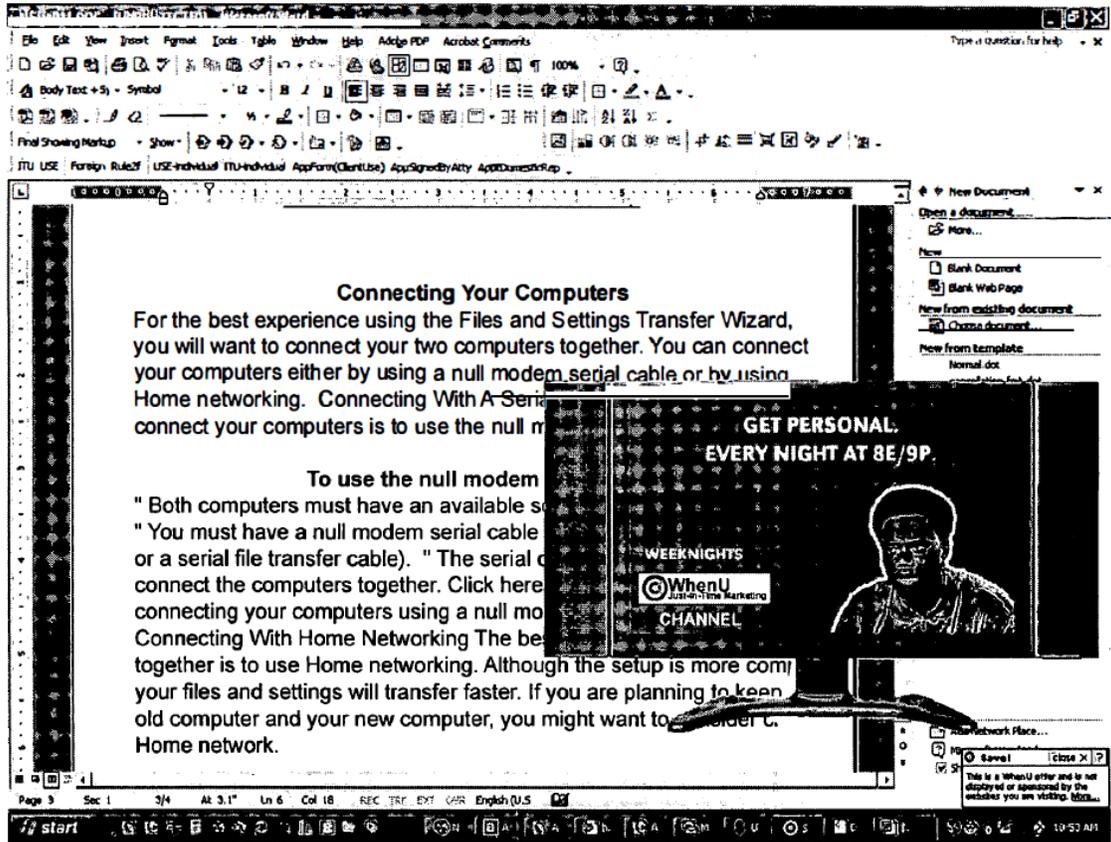


Figure 1H depicts a computer display with an active Microsoft Word application and a “shaped advertising presentation” generated by the client software. *Id.* ¶¶ 26, 34. When a user clicks on the presentation, a browser web page is launched showing additional advertising information. *Id.* ¶¶ 27–29, 35.

#### 4. *The Combination of Wilson, Backus, and Tandetnik*

For its challenge to the claims based on the combination of Wilson, Backus, and Tandetnik, Petitioner primarily relies on the disclosure of

Wilson, with certain limitations asserted to be taught or suggested by Wilson in combination with Backus, or by Wilson in combination with Tandetnik, as discussed below. Pet. 14–59.<sup>14</sup> As set forth above, and as the record establishes, all three references disclose servers connected via the Internet to networked computer devices, with specialized applications downloaded to the devices for the purpose of displaying notifications that are used to convey content to the users when the user “clicks” on the notification (advertising content in the case of Wilson and Tandetnik). *See* Rosenberg Decl. ¶¶ 64–78.

The record further establishes that one of ordinary skill would have been motivated to adapt Wilson to incorporate certain implementation details taught in Backus. In particular, in connection with the claim 1 requirement that the applet application provides for “display of the content in a predetermined portion of a user display that is less than an entire display of the networked device,” Wilson discloses that an “advertising campaign server” sends advertisements, displayed as notifications on a portion of a user display that is less than an entire display, and Backus discloses displaying advertisement presentations in a predetermined portion of the display. Ex. 1005, Fig. 5; Ex. 1006 ¶ 41. Given this, the preponderance of the evidence supports Petitioner’s expert’s testimony that one of ordinary skill would have been motivated to adapt, and would have a reasonably

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<sup>14</sup> For some limitations of the claims, Petitioner presents alternative obviousness grounds based on additional combinations of Wilson with Backus and/or Tandetnik. Pet. 14–59. However, given our determinations set forth in the following discussion in Section III.E.5 of the claim 1 requirements, it is unnecessary to consider those additional contentions.

expected to succeed in adapting, Wilson to deploy the notification in a predetermined location, as taught by Backus, and in accord with well-known Windows programming techniques. Rosenberg Decl. ¶¶ 130–137.

The record also establishes that one of ordinary skill would have been motivated to adapt Wilson to incorporate certain well-known and routine implementation details taught in Tandetnik. In particular, Petitioner relies on the combination of Wilson and Tandetnik in connection with the claim 1 requirement that the system comprise “a microprocessor running a software application for delivering an applet application to the networked device and managing the delivery of the applet application to the networked device.” Pet. 17–21. Wilson discloses that an “advertising campaign server” sends advertisements to an “advertising campaign application” installed on personal computers of members who have agreed to receive targeted advertising campaigns, and Tandetnik teaches that it was known for users to download and install applications to their computer from servers. Ex. 1005, Figs. 1, 2a, 2b, ¶¶ 1, 23, 30, 37, 42; Ex. 1007 ¶¶ 45–46. Given this, the preponderance of the evidence supports Petitioner’s expert’s testimony that one of ordinary skill would have been motivated to adapt, and would have a reasonably expected to succeed in adapting, Wilson to enable downloading the advertising campaign application using the processor subsystem of the advertising campaign server, which the skilled artisan would have recognized was a convenient and conventional way to install an application. Rosenberg Decl. ¶¶ 91–97.

In addition, in connection with the claim 1 requirement that “the one or more applet is configured to deploy at least one of independent of or in conjunction with an internet browser window,” Wilson discloses first

displaying a notification icon, followed by displaying an internet browser window after a user selects a “link” command interface. Ex. 1005, Figs. 5, 8, ¶¶ 40, 41, 46; Rosenberg Decl. ¶ 140. Thus, the notification is deployed independent of a browser window. Rosenberg Decl. ¶¶ 141–142. Tandetnik also discloses this capability, but in addition discloses deploying the advertising presentation in conjunction with the browser window:

The presentation may initially appear as part of a browser view (see FIG. 1E, 1F) but may be independent of it in the sense that when that particular browser view is closed, the presentation may remain as part of an underlying application (see FIG. 1H) or ultimately as part of an underlying desktop or palmtop display (see FIG. 1G).

Ex. 1007 ¶ 34; Rosenberg Decl. ¶¶ 143–145. Given this, and given the advantage of conventional, well-known protocols and programs, such as HTML or Java, used by web browsers to more easily display the notification to the user, the preponderance of the evidence supports Petitioner’s expert’s testimony that one of ordinary skill would have been motivated to adapt, and would have a reasonably expected to succeed in adapting, Wilson’s teachings to display a notification as part of a browser view as well as independent of a browser view. Pet. 35–36; Rosenberg Decl. ¶¶ 146–150.

We further refer to these combinations in the context of the analysis of the pertinent claim requirements of the independent claims, set forth below.

Patent Owner argues that Petitioner inappropriately “presents voluminous and excessive possible combinations without any clear explanation of what combination it relies on.” PO Resp. 28–29; *see also* Pet. Sur-Reply 9–10. However, we are not persuaded that Petitioner’s reliance on alternative grounds for obviousness is inappropriate. As stated

above, we address the combinations argued by Petitioner that are necessary to resolve the issues, and do not agree that Petitioner presents “hundreds of possible combinations” that must be addressed, as Patent Owner alleges. PO Resp. 28.

Patent Owner does not specifically challenge the combination of Wilson with Tandetnik, but argues Backus is not combinable with Wilson and Tandetnik because it “operates completely differently.” PO Resp. 25–28. Patent Owner argues that Backus is directed to a desktop resource for receiving content from sources local to the computer system, in contrast to Wilson and Tandetnik, which deal with receipt of remotely-sourced advertising content. *Id.* We are not persuaded that there is a significant difference between the approaches of the three references relied on. Like Wilson and Tandetnik, the sources of the alerts displayed by Backus include remote sources: news publishers, e-mail senders, and instant message senders. Ex. 1006, Fig. 5.

Moreover, obviousness entails an inquiry that is “expansive and flexible” and takes into account “the inferences and creative steps “a person of ordinary skill in the art would employ” when presented with the teachings of the prior art. *KSR*, 550 U.S. at 415–18. “[I]n many cases a person of ordinary skill will be able to fit the teachings of multiple patents together like pieces of a puzzle. . . . A person of ordinary skill is also a person of ordinary creativity, not an automaton.” *Id.* at 420–421. The record establishes that one of ordinary skill would have readily made use of the pertinent teachings of Backus notwithstanding the fact that it was directed to news release and email notifications and the like. Rosenberg Decl. ¶ 134. Significantly, “[t]he test for obviousness is not whether the features of a

secondary reference may be bodily incorporated into the structure of the primary reference . . . . ‘Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art.’” *In re Keller*, 642 F.2d 413, 425 (CCPA 1981). “Combining the *teachings* of references does not involve an ability to combine their specific structures.” *In re Nievelt*, 482 F.2d 965, 968 (CCPA 1973).

## 5. *Independent Claims 1 and 36*

### a) *Preamble*

For the preamble of claim 1 (“system for delivering information to a networked device of a user”), we need not reach the question of whether the preamble is limiting, because the record establishes that Wilson Figure 1 discloses an “AC server” that delivers information via the Internet to networked computer devices. Ex. 1005, Figs. 1, 2a, 2b, ¶¶ 9, 23–25, 29–30, 37; Rosenberg Decl. ¶¶ 80–83.

### b) *microprocessor*

The first element of claim 1 requires, in part, “a microprocessor running a software application for delivering an applet application to the networked device and managing the delivery of the applet application to the networked device.” Ex. 1001, 14:11–14. The record establishes that the combination of Wilson and Tandetnik teaches this limitation. Pet. 17–21. Wilson discloses that the AC Server includes a processor subsystem that controls the overall operation of the server. Ex. 1005, Fig. 2a, ¶¶ 27–28; Rosenberg Decl. ¶¶ 85–86. Wilson also discloses the downloading of resident media applications onto the personal computers of members who

have agreed to receive targeted advertising campaigns. Ex. 1005 ¶¶ 23–24, 27–30; Rosenberg Decl. ¶¶ 88–89. As discussed above, although Wilson does not explicitly disclose that the processor of the AC Server manages the delivery of the resident media applications, the record establishes that, given the analogous application downloading functionality disclosed in Tandetnik, it would have been obvious to one of ordinary skill in the art for the AC Server to have that capability. Ex. 1005 ¶¶ 31, 37, 40, 42; Ex. 1007 ¶ 45; Rosenberg Decl. ¶¶ 90–97. In addition, the resident media application of Wilson is an “applet application” because it deploys notification icons which are “applets” according to our construction of that term. Pet. 18; Rosenberg Decl. ¶ 87. Patent Owner does not offer any specific arguments to refute this record.

*c) passive deployment*

The first element of claim 1 additionally includes: “wherein the applet application passively deploys one or more applets at a time of deployment.” Ex. 1001, 14:14–16. The record establishes that Wilson discloses that the resident media application deploys “pop-up notification icons,” which, given that they are notifications, are “applets.” Ex. 1005, Figs. 6–8, ¶¶ 40–41, 44; Rosenberg Decl. ¶¶ 98–100. We agree with Petitioner that Wilson discloses that the deployment of the notification icons is passive, as required by the first element of claim 1, because the resident media application deploys the applet without requiring user input or activity. Pet. 22–24 (citing Ex. 1005 ¶¶ 27, 30, 36, 40); Rosenberg Decl. ¶¶ 101–105.

Patent Owner argues Wilson does not disclose this requirement because it “requires a ‘point and click’ to ‘open[] dialog box 124.’” PO

Resp. 22–23; PO Sur-Reply 6–8. This argument is without merit. The record establishes that, in Wilson, the notification icon 122 (which transitions to icon 122') deploys without user interaction. Ex. 1005, Figs. 6–8, ¶¶ 41–44. The fact that the associated dialog box 124 requires a point and click to open is irrelevant to the analysis — the claim requirement is agnostic as to this separate feature of Wilson. Pet. Reply 6–7 (citing Rosenberg Decl. ¶¶ 102–105).

*d) delivery and display*

The second element of claim 1 consists of five “wherein” clauses. The first wherein clause requires, “the applet application provides for delivery of content to the networked device and a display of the content in a predetermined portion of a user display that is less than an entire display of the networked device, by the one or more applets.” Ex. 1001, 14:17–21. Petitioner argues that the combination of Wilson and Backus teaches this limitation. Pet. 29–33. We agree. In particular, the record establishes that Wilson discloses that the notification icons contain advertising content, and provide a means to display such content when a user clicks on various command buttons. Ex. 1005, Fig. 8, ¶¶ 45–46; Pet. 29; Rosenberg Decl. ¶¶ 124–125, 127. Wilson also discloses that the notification icon only takes up part of the screen. Ex. 1005, Figs. 5, 8, ¶¶ 40–41; Rosenberg Decl. ¶¶ 128.

As discussed above, although Wilson does not explicitly disclose that the notification icon is placed in a predetermined position, the record establishes that it would have been obvious to one of ordinary skill in the art that the notification icon is placed in a predetermined position, as confirmed by an explicit mention of that capability in regard to the analogous desktop

alerts discussed in Backus. Pet. 30–33 (citing Ex. 1006 ¶¶ 41, 53); Rosenberg Decl. ¶¶ 129–137. Patent Owner argues one of ordinary skill would not have been motivated to combine Wilson with Backus in this manner. PO Resp. 25–28. However, as discussed above, we are not persuaded by this argument.

*e) independent or in conjunction with*

The second wherein clause requires, “the one or more applet is configured to deploy at least one of independent of or in conjunction with an internet browser window.” Ex. 1001, 14:21–24. The record establishes that Wilson discloses that the resident media application deploys the notification icons independent of a browser. Ex. 1005, Fig. 5 (steps 80, 82, 84), ¶¶ 40–41; Rosenberg Decl. ¶¶ 140–142.

Also, as discussed above, the record establishes that it would have been obvious to one of ordinary skill in the art to display the notification icon of Wilson in conjunction with a browser window, given the disclosure to that effect in Tandetnik. Pet. 35–36; Rosenberg Decl. ¶¶ 146–150.

*f) browser deployment*

The third wherein clause requires, “an internet browser is configured to deploy subsequent to deployment of the one or more applets based on at least one action or inaction of the user.” Ex. 1001, 14:24–27. The record establishes that when a user clicks on the “link” button of the notification icon, an Internet browser is opened. Ex. 1005, Figs. 5, 8, ¶¶ 8, 24, 40, 46, claim 4; Rosenberg Decl. ¶¶ 152–156.

*g) applet becom[ing] idle*

The fourth wherein clause requires, “at least one of the applets is configured to become idle upon deployment of the internet browser.” Ex. 1001, 14:27–29. We agree with Petitioner that Wilson discloses this feature by disclosing that after a user clicks on the “link” button to open the browser, the notification icon is closed. Pet. 41–43 (citing Ex. 1005, Fig. 5, ¶¶ 40–41, 46); Rosenberg Decl. ¶¶ 158–163.

Patent Owner argues this claim requirement is not taught or suggested by Wilson because, in Wilson, after the notification icon is closed, the process comes to a “full stop,” which, argues Patent Owner, is distinct from being in an idle state. PO Resp. 20–22. However, the record establishes that, after the notification icon is closed, it is then redeployed when new media is received, and thus the process is not “truly exit[ed] out.” Ex. 1003 ¶ 160; Ex. 1040, 116:17–117:12; Ex. 2070, 12:6–13:5. Moreover, claim 13 of the ’762 patent recites that the applet “becomes idle via ... deactivating.” Ex. 1001, 15:9–11. Thus “idle” encompasses “deactivating,” and Patent Owner does not dispute that Wilson teaches at least “deactivating” the notification icon. Pet. Reply 8.

*h) continue to operate*

The fifth wherein clause requires, “the deployment of the one or more applets is such that at the time of deployment of the one or more applets the user can continue to operate the networked device in a state prior to the deployment of the one or more applets.” Ex. 1001, 14:29–33. The record establishes that, in Wilson, while the notification icon is displayed, other applications, such as Microsoft Word are available for user interaction.

Ex. 1005 ¶¶ 40, 43–44; Rosenberg Decl. ¶¶ 175–176. Wilson teaches that the resident media application continuously monitors the notification icon to determine whether a user has interacted with the applet’s interface, which sufficiently suggests that the user need not interact with the interface, but instead is able to continue using other applications (such as a word processing application) running on the user’s computer. Rosenberg Decl. ¶ 175.

*i) first database*

The third element of claim 1 requires, “a first database coupled to the microprocessor and storing a first set of information relating to the user.” Ex. 1001, 14:34–35. The record establishes that Wilson discloses that the AC Server includes an “audience demographics database” that meets this limitation. Ex. 1005, Figs. 2a, 3, ¶¶ 28, 36, 38; Rosenberg Decl. ¶¶ 201–202. Patent Owner does not challenge that Wilson discloses this claim requirement.

*j) second database*

The fourth element of claim 1 requires, “a second database coupled to the microprocessor and including a second set of information for comparison to the first set of information.” Ex. 1001, 14:36–38. Our analysis of this element to some extent parallels the above analysis regarding conception of this subject matter, except the parties switch sides on the arguments. Petitioner argues that Wilson discloses this limitation by disclosing “criteria statements,” which describe the “target audience criteria” for an advertising campaign, which criteria is compared to the data in the audience demographics database. Pet. 55–56 (citing Ex. 1005, Fig. 2a, ¶¶ 30–31, 34,

36, 39); Rosenberg Decl. ¶¶ 204–205. Petitioner admits that Wilson “does not show where these [criteria] statements are stored.” Pet. 56. However, Petitioner argues that it would have been obvious to store the criteria statements, because Wilson provides that the “campaign database” is updated based on reports received from user’s PCs during a campaign, which in turn would require recomparison of new demographics information to the campaign’s previously used criteria statements — thus requiring the criteria statements to have been stored. Pet. 56–57 (citing Ex. 1005 ¶ 34); Rosenberg Decl. ¶¶ 206–209. Furthermore, argues Petitioner, storing that information in a database would have been an obvious design choice. Pet. 57; Rosenberg Decl. ¶¶ 208–209.

Patent Owner argues that the use of criteria statements in Wilson would not have taught or suggested the required second database. PO Resp. 9–19. First, Patent Owner points out that databases are used throughout the Wilson disclosure to store other types of information, including the audience demographics database and multiple “campaign databases” — “Wilson uses the term ‘database’ forty times in the Specification,” argues Patent Owner. *Id.* at 9 (citing Ex. 2060 ¶¶ 38–39). But Wilson makes no mention of storing the criteria statements that are compared to the audience demographics, let alone storing that information in a database. *Id.* To the contrary, argues Patent Owner, a straightforward reading of Wilson strongly suggests that the criteria statements are not stored, but simply provided to the system as “one-off user submitted inputs” when an advertising campaign is being created:

[C]riteria Statements for a target audience is received. . . .  
Information derived from the criteria Statements are applied to  
the audience demographic database in order to generate a target  
audience database.

Ex. 1005 ¶ 39; PO Resp. 9–10; *see also* Ex. 1005 ¶¶ 30, 31; Ex. 2060 ¶ 39.

Patent Owner argues one of ordinary skill would have so interpreted Wilson given Figure 2a of Wilson, reproduced below.

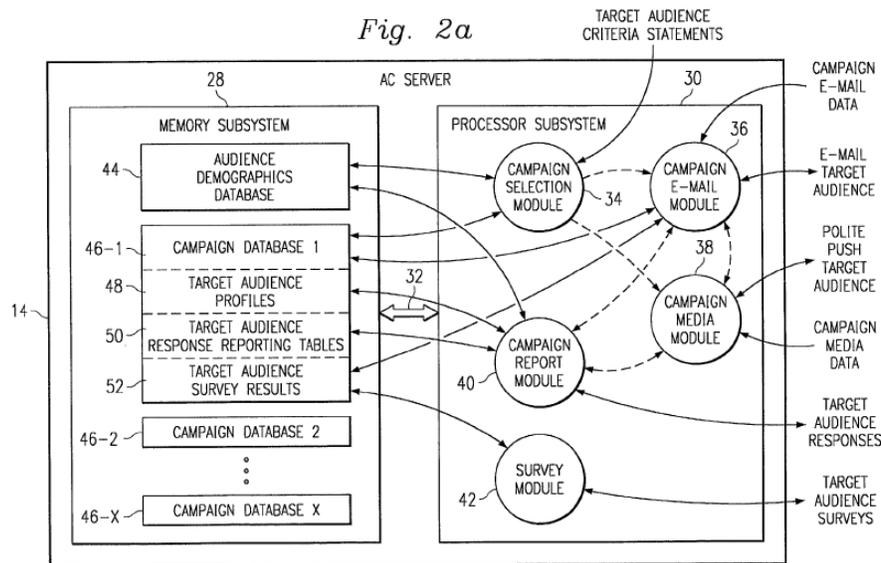


Figure 2a depicts a block diagram of the advertising campaign server. Ex. 1005 ¶ 15. According to Patent Owner, Figure 2A indicates that the “target audience criteria statements” are inputs coming from outside the server, and not stored in the system, in contrast to audience demographics database 44, campaign database 46-1, campaign database 46-2, campaign database 46-x, memory subsystem 28, and processor subsystem 30. PO Resp. 10–11 (citing Ex. 1005, Fig. 2a).

Regarding Petitioner’s argument that criteria statements would obviously have been stored for use in updating the campaign database based on reports of new demographics information, Patent Owner argues that this argument is solely based on conclusory testimony of Petitioner’s expert, based on hindsight, and unsupported by the evidentiary record. PO Resp. 13–16; PO Sur-Reply 2. Patent Owner points out that the portion of Wilson

on which Petitioner relies, which provides that “responses received by the CR module 40 are also used to update the audience demographics database and/or the campaign database,” involves the “Campaign Report Module” shown in Figure 2A reproduced above, but the same figure shows that the target audience criteria statements are not provided to that module, but rather to the Campaign Selection Module. PO Resp. 16–17 (citing Ex. 1005, Fig. 2a, ¶¶ 30, 34; Ex. 2060 ¶¶ 52–53). As Patent Owner argues, the only “update” examples that Wilson provides for the demographics database are deletion of “IP addresses” that are returned as no longer valid. PO Sur-Reply 2–3 (citing Ex. 1005 ¶ 34).

Patent Owner further challenges Petitioner’s designer’s choice argument, given that, even if the target audience criteria statements were stored, there would have been multiple other options beside databases to choose from, such as volatile memory, nonvolatile memory, flat text files, and structured data. PO Resp. 12 (citing Ex. 2060 ¶¶ 44–46). Patent Owner argues that since each storage option has its own advantages and disadvantages, there is no reason why one of ordinary skill would have been motivated to single out a database as a “matter of design choice,” particularly since such modification of Wilson would have added “significant and unnecessary overhead.” PO Resp. 18–19 (citing Ex. 2060 ¶¶ 54–56).

In response to Patent Owner’s arguments, Petitioner argues it is irrelevant that Wilson does not expressly disclose storing target audience criteria statements in a database, because its expert has explained why it would have been obvious to do so. Pet. Reply 1, 3–4. Petitioner also cites the testimony of Patent Owner’s expert that a person of ordinary skill in the

art would have wanted to retain criteria statements to later check for logical errors. *Id.* at 2 (citing Ex. 1040, 86:7–87:15, 113:13–114:13). Patent Owner responds that its expert also testified that logical errors could be tested without storing criteria statements. PO Sur-Reply 4–5 (citing Ex. 1040, 87:16–92:3).

We agree with Patent Owner that the record does not establish by a preponderance of the evidence that the second database limitation would have been taught or suggested by the combination of Wilson, Backus, and Tandetnik. Wilson, the only reference relied on for this limitation (Pet. 55–57), makes no mention of a second database that stores the information used to compare to the information in the claimed (and explicitly disclosed) first database. Wilson only discloses that the information (the “criteria statements”) is “received” from somewhere outside the advertising campaign server, with no indication that it was obtained from storage or that it is retained after use. Ex. 1005, Fig. 2a, ¶ 39. We agree with Patent Owner that Petitioner’s reliance on a mention in Wilson of updating the campaign database based on reports of new demographics information (Pet. 56) is unpersuasive, given that it involves the “Campaign Report Module” which has no ability to receive target audience criteria statements. PO Resp. 16–17 (citing Ex. 1005, Fig. 2a, ¶¶ 30, 34; Ex. 2060 ¶¶ 52–53). As Patent Owner argues, the only “update” examples that Wilson provides for the demographics database are deletion of “IP addresses” that are returned as no longer valid. PO Sur-Reply 2–3 (citing Ex. 1005 ¶ 34).

Petitioner’s expert testifies, “In my opinion, one of ordinary skill in the art would understand that the target audience criteria statements would be stored in a second database until they are transmitted to and received by

[the server].” Rosenberg Decl. ¶ 205. Petitioner’s expert opines that it would have been obvious to store the criteria statements in the “campaign database 46-1.” *Id.* ¶ 207. But as shown in Figure 2a, reproduced above, campaign database 46-1 is contained as part of the server, whereas the “target audience criteria statements” are external inputs to the server. We are not persuaded by Dr. Rosenberg’s conclusory testimony that an ordinarily skilled artisan would have been motivated to store the criteria statements with the campaign database, which is already configured to store the results of the target audience comparison, in order to keep the query and results together. *See* Rosenberg Decl. ¶ 207. Even if this redesign of the campaign database were implemented, there is nothing to suggest that information stored in such a results-oriented database would be used to compare to the user profiles when implementing a new campaign — *i.e.*, there is no basis for such information to be used “for comparison to the first set of information,” as required by claim 1.

In sum, Petitioner cannot fill in the gaps in the actual teachings of Wilson by relying on this conclusory, unpersuasive, testimony of its expert:

Expert testimony, however, cannot take the place of a disclosure in a prior art reference, when that disclosure is required as part of the unpatentability analysis. . . . [I]n an obviousness analysis, conclusory assertions from a third party about general knowledge in the art cannot, without supporting evidence of record, supply a limitation that is not evidently and indisputably within the common knowledge of those skilled in the art. *K/S Himpp v. Hear-Wear Techs., LLC*, 751 F.3d 1362, 1365 (Fed. Cir. 2014). Furthermore, because an inter partes review may only be requested “on the basis of prior art consisting of patents or printed publications,” 35 U.S.C. § 311(b), expert testimony cannot take the place of disclosure from patents or printed publications. In other words, expert testimony may explain

“patents and printed publications,” but is not a substitute for disclosure in a prior art reference itself.

Patent Trial and Appeal Board Consolidated Trial Practice Guide  
(November 2019), 36.

*k) compare information*

The fifth element of claim 1 requires, “wherein the microprocessor compares the first set of information to the second set of information to determine whether the content should be transmitted to the networked device for display by the one or more applets.” Ex. 1001, 14:39–43. Aside from the issue of whether the second set of information is stored in a database, the record establishes that Wilson discloses determining the targets for receipt of advertising campaign material by comparing the target audience criteria to the data in the audience demographics database. Ex. 1005, Fig. 4, ¶¶ 16, 30, 39; Rosenberg Decl. ¶¶ 211–214.

*l) Claim 36*

Petitioner’s contentions that independent claim 36 is obvious over the combination of Wilson, Backus, and Tandetnik are substantially similar to those discussed above for claim 1. Pet. 66–68; Rosenberg Decl. ¶¶ 243–244. Therefore, the above analysis of claim 1 is applicable to claim 36, which recites limitations similar to claim 1, including the second database limitation.

*m) Summary*

In sum, based on our review of the record as a whole, because the combination of Wilson, Backus, and Tandetnik does not teach or suggest the

second database limitation, we determine that Petitioner has failed to prove by a preponderance of the evidence that the subject matter of claims 1 and 36 of the '762 patent would have been obvious in light of the combination of Wilson, Backus, and Tandetnik.

*6. Claims 3 and 7–9*

Claims 3 and 7–9 depend from claim 1. Ex. 1001, 14:47–49, 58–67. Because we have determined that Petitioner has failed to prove by a preponderance of the evidence that claim 1 is unpatentable in light of the Wilson, Backus, and Tandetnik, Petitioner's challenge to these claims also fails. However, for completeness of the record, we consider the additional requirements of these dependent claims.

Claim 3 adds to claim 1 the requirement that “the first database and the second database are each maintained on a server.” Ex. 1001, 14:47–49. Because, as discussed above, the combination of Wilson, Backus, and Tandetnik does not teach or suggest the second database limitation, Petitioner has failed to prove by a preponderance of the evidence that the subject matter of claim 2 would have been obvious in light of the combination of Wilson, Backus, and Tandetnik. However, the record establishes that, in Wilson, the audience demographics database, which would correspond to the claimed first database, is maintained on a server. Ex. 1005, Fig. 2a.

Claim 7 adds to claim 1 the requirement that “the content includes at least one of an advertisement, an offer, a coupon, a news item, a notice, and an alert.” Ex. 1001, 14:58–60. The record establishes that Wilson discloses that the notification icon can include advertisements in the form of corporate

logos and related information, such as a car advertising offer. Ex. 1005 ¶ 45, claims 5–6; Rosenberg Decl. ¶¶ 261–262.

Claim 8 adds to claim 1 the requirement that “the content includes information based on predetermined criteria of the user.” Ex. 1001, 14:61–63. The record establishes that Wilson discloses campaign media data transmitted to the resident media application for display, selected based on predetermined user criteria, such as the survey results that are stored in audience demographic database and compared to the campaign criteria statements. Ex. 1005 ¶¶ 31–33; Rosenberg Decl. ¶ 264.

Claim 9 adds to claim 1 the requirement that “the display of the content by the one or more applets occurs automatically and without interrupting an interaction of the user with an active application.” Ex. 1001, 14:64–67. This claim requirement is satisfied for the same reasons as discussed above in connection with the wherein clause of the first element of claim 1, and the fifth wherein clause of the second element of claim 1. Pet. 74–75.

### *7. Independent Claims 14, 25, and 37*

Independent claims 14, 25, and 27 are substantially similar to claim 1, except that these claims do not require a first and second database, instead only requiring information relating to the user to be compared to information relating to “parameters for transmission of the content to the networked device” (claims 14 and 25), or comparing “a plurality of data sets (claim 37). Ex. 1001, 15:12–41, 16:6–42, 18:9–33.

Therefore, the analysis of these claims is substantially the same as that for independent claims 1 and 36, except for the database requirements. *See* Pet. 60–66, 68–70; Rosenberg Decl. ¶¶ 216–242, 246–255.

For the reasons explained above in connection with claim 1, we determine that the preponderance of the evidence demonstrates that the subject matter of independent claims 14, 25, and 37 of the '762 patent would have been obvious in light of the combination of Wilson, Backus, and Tandetnik.

*8. Claims 18–20, 22, 24, 29–31, 33, and 35*

Dependent claims 18 and 29 add the same requirement to claims 14 and 25, respectively, as claim 7 adds to claim 1; dependent claims 19 and 30 add the same requirement to claims 14 and 25, respectively, as claim 8 adds to claim 1; dependent claims 20 and 31 add the same requirement to claims 14 and 25, respectively, as claim 9 adds to claim 1. Ex. 1001, 15:50–59, 16:51–60. Therefore, the analysis of claims 18–20 and 29–32 is the same as for claims 7–9, discussed above.

Claims 22 and 33 add to claims 14 and 25, respectively, the requirement, “deliver[ing] a third set of information to the networked device based on an act of the user with respect to the content after transmission of the content to the networked device.” Ex. 1001, 15:63–67, 16:65–17:2. The record establishes that Wilson discloses that when a user clicks on a link displayed in the notification icon, an Internet browser is opened to go to a specified web address. Ex. 1005, Fig. 8, ¶¶ 40–41, 46. The website information corresponds to the “third” set of information as claimed. Rosenberg Decl. ¶¶ 274–277.

Claims 24 and 35 add to claims 22 and 33, respectively, the requirement, “wherein the act of the user is a mouse click on the content displayed via the one or more applets.” Ex. 1001, 16:3–5, 17:6–8. The record establishes that Wilson discloses that selecting the link can be a “‘point and click’ operation using a mouse.” Ex. 1005 ¶ 44; Rosenberg Decl. ¶¶ 278–279.

Accordingly, we determine that the preponderance of the evidence demonstrates that the subject matter of claims 18–20, 22, 24, 29–31, 33, and 35 of the ’762 patent would have been obvious in light of the combination of Wilson, Backus, and Tandetnik.

*F. Obviousness of Claims 1, 3, 7–9, 14, 18–20, 22, 24–25, 29–31, 33, and 35–37 over the combination of Wilson, Backus, Tandetnik, and Carney*

In the alternative, Petitioner challenges claims 1, 3, 7–9, 14, 18–20, 22, 24–25, 29–31, 33, and 35–37 as obvious over the combination of Wilson, Backus, Tandetnik, and Carney. Pet. 76–79. As discussed above, Petitioner presents this alternative in the event that the “comparing” elements of independent claims 1, 14, 25, 36, and 37 are construed to require “geotargeting” to determine the content sent to the users. Pet. 76. Petitioner does not otherwise rely on the additional reference, Carney, for any of the claim requirements discussed above, including the “second database” requirement that we have determined is not taught or suggested by the combination of Wilson, Backus, and Tandetnik. Thus, we determine that Petitioner has failed to prove by a preponderance of the evidence that the subject matter of claims 1, 3, 7–9, and 36 of the ’762 patent would have

been obvious in light of the combination of Wilson, Backus, Tandetnik, and Carney.

Otherwise, because we have not construed the “comparing” elements to require “geotargeting” to determine the content sent to the users, and because we determine that Petitioner has shown by a preponderance of the evidence that the subject matter of claims 14, 18–20, 22, 24–25, 29–31, 33, 35, and 37 of the ’762 patent would have been obvious in light of the combination of Wilson, Backus, and Tandetnik, we do not address the patentability of these claims under this alternative ground of unpatentability as it would apply to claims. *See SAS Inst. Inc. v. Iancu*, 138 S. Ct. 1348, 1359 (2018) (holding a petitioner “is entitled to a final written decision addressing all of the claims it has challenged”).

#### IV. CONCLUSION<sup>15</sup>

In summary:

<b>Claims</b>	<b>35 U.S.C. §</b>	<b>References</b>	<b>Claims Shown Unpatentable</b>	<b>Claims Not shown Unpatentable</b>
1, 3, 7–9, 14, 18–20, 22, 24, 25,	103(a)	Wilson, Backus, Tandetnik	14, 18–20, 22, 24–25, 29–31, 33, 35, 37	1, 3, 7–9, 36

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<sup>15</sup> Should Patent Owner wish to pursue amendment of the challenged claims in a reissue or reexamination proceeding subsequent to the issuance of this decision, we draw Patent Owner’s attention to the April 2019 *Notice Regarding Options for Amendments by Patent Owner Through Reissue or Reexamination During a Pending AIA Trial Proceeding*. *See* 84 Fed. Reg. 16,654 (Apr. 22, 2019). If Patent Owner chooses to file a reissue application or a request for reexamination of the challenged patent, we remind Patent Owner of its continuing obligation to notify the Board of any such related matters in updated mandatory notices. *See* 37 C.F.R. § 42.8(a)(3), (b)(2).

29–31, 33, 35–37				
1, 3, 7–9, 14, 18–20, 22, 24, 25, 29–31, 33, 35–37	103(a)	Wilson, Backus, Tandetnik, Carney	—	1, 3, 7–9, 36
<b>Overall Outcome</b>			14, 18–20, 22, 24–25, 29–31, 33, 35, 37	1, 3, 7–9, 36

### V. ORDER

In consideration of the foregoing, it is hereby

ORDERED that Petitioner has not demonstrated by a preponderance of the evidence that claims 1, 3, 7–9, and 36 of the '762 patent are unpatentable;

ORDERED that Petitioner has demonstrated by a preponderance of the evidence that claims 14, 18–20, 22, 24–25, 29–31, 33, 35, and 37 of the '762 patent are unpatentable;

FURTHER ORDERED that Petitioner's Motion to Exclude Exhibit 2030 ¶ 46 is denied;

FURTHER ORDERED that Petitioner's objections to Mr. Gaidemak's testimony during oral hearing are overruled; and

FURTHER ORDERED that, because this is a Final Written Decision, any party to the proceeding seeking judicial review of the decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

IPR2019-00050  
Patent 9,454,762 B2

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